00083578

BOMBAY BRANCH
OF THE
ROYAL ASIATIC SOCIETY.
TOWN HALL, BOMBAY.

Digitized with financial assistance from the
Government of Maharashtra
on 18 July, 2018

JOSEPH THOMSON.

From a Photograph by Maull and Fox, London.

TO THE

CENTRAL AFRICAN LAKES

AND BACK:

THE NARRATIVE OF THE ROYAL GEOGRAPHICAL SOCIETY'S

EAST CENTRAL, AFRICAN EXPEDITION, 1878-80.

BY

JOSEPH THOMSON, F.R.G.S.,

In Command of the Expedition.

£3578

WITH A SHORT BIOGRAPHICAL NOTICE OF THE LATE MR KEITH JOHNSTON,

" PORTRAITS, AND A MAP.

IN TWO VOLUMES.

VOL. II.

London:

SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON,

CROWN BUILDINGS, 188, FLEET STREET.

1881.

[*All rights reserved.*]

916.7
Tho/Tot
83578

LONDON:
GILBERT AND RIVINGTON, PRINTERS,
ST. JOHN'S SQUARE.

CONTENTS.

CHAPTER I.

TOILING BY TANGANYIKA.

PAGE

Pambete in 1867 and 1879—Its Situation and Scenery—Rencontre with a Crocodile—A Pleasant Surprise—My Task Finished—New Venture determined upon—Onward for the Lukuga—First Glimpses of the Slave-trade—Setchè—Iendwe—Astonishing the Natives—Interview with the Arabs—A Perilous Quest: Who will go?—Importance of Iendwe—Decline of the Ivory Trade—Arab Hospitality—Free from Caravan Cares—Caged—Itawa and its People—Holding a Reception—Pamlilo: a Serio-Comic Situation—An Impromptu Ghost Scene—Meanness of the Chief—Roughing it—Toil in Earnest—In the Home of Storms—The Marungu: Life and Traits—Their Excitability—A Critical Moment—"Up to the Jaws of Death"—Safety in Confidence—Weakness *versus* Will—Kwamanda—The Tchansa Mountains—At a Lion's mercy—Mpala in Uguha—Tembwe: No Admission!—An awe-inspiring Ceremony—A Sanguinary Potentate—Exciting News—Christmas, 1879—Eureka—Examination of the Lukuga River—Stanley's Prophecy verified—On to Mtowa—Mystification—The Mtowa Missionaries 1

CHAPTER II.

THE LUKUGA AND UJIJI.

PAGE

Burton's Visit to Tanganyika—Livingstone's Researches —Cameron and Stanley's Explorations and Conclusions—Hore's Discovery of the Lukuga River—Three Queries—Stanley's Theory as to the Lukuga—Hore's Theory—Suggested Solution of the Problem—General Conclusions—Visit to Ujiji resolved upon—A Slave Caravan—The Arabs of Central Africa—New Year's Day, 1880—A Strange Story—On Board for Ujiji—A dangerous Cargo—Unpromising Seamanship—Threatened Capsize—A Midnight Hurricane—Critical Conflict—In sorry Plight—Washed Ashore—Hospitality at Ujiji Mission—A true Missionary—Missionary Methods—Notes on Ujiji—The Market—Business among the Wajiji—The Abbé Debaize and his Disasters—Kindness of the English Missionaries to him—His death—Extortion by the French Consul —Extraordinary Outfit—A French Scheme of Progression — Refreshing Companionship — Return Voyage to Mtowa—Caught in a Tempest—Battling with the Elements—In utmost Peril—The Haven reached at last—New Exploration planned and begun —A Warua Army—Refractory Conduct of the Porters—Desertion Suspected—Obstruction continued—Following the Lukuga—Makalumbi and its People—Hair-dressing Extraordinary—A Native Swell—Artistic Tattooing—A Weird Reception-room—A Strike and a Compromise—The Men still intractable—Coming to a Crisis—Taking the Wolf by the Ears—Victorious—Across the Lukuga—Master of the Situation 62

CHAPTER III.

AMONG THE WARUA.

Akilonda—Crossing the Nyemba—Change in the Temperature—Deserted by our Guide—Makasenga—

PAGE

Interview with the Chief—A Grave Indictment—A Cool Guide—Tantalus' Tortures—Questionable Consolation—Makaunga and its Chief—Made Subjects for Sport—Startling Discovery—In Greasy Glory—Undesirable Precedence—Trouble at Kwakisa—At Bay—A Momentary Respite—Porters Panic-stricken—Alarming Uproar—Trapped—Stop Thief!—Bloodthirsty Scoundrels—A Battle with Bodkins—Besieged—Kwamgoya: Renewed Troubles—Unenviable Notoriety—A Moment of Laughter—Ordeal Demanded—My precious Note-book Stolen—Makiyombo—Too Pressing Attentions—Kiyombo Unveiled—Taken to Avizandum—Teaching me Manners—Kiyombo Dissatisfied—Our Progress finally Stayed—Drinking Scene—An Injured Husband—Rapacity Rampant—Character and Customs of the Warua—The Country—Ordered to Retrace our Steps—In Retreat—Avoiding the Villages—The Natives in a Fury—Escaped—Makihuyu: Delayed by Force—Persistent Greed—The Chief Hoodwinked—A New Extinguisher—Parting Mementoes—Taken in—A Rude Awakening—Charge of the Light Brigade—Ready for Fight or Flight—Sheep under the Shearer—Warua Superstitions—Out of the Valley of Death—Thwarted Plans—A Race with the Porters—A Non-triumphal Entry 120

CHAPTER IV.

TWO HUNDRED MILES BY CANOE.

Pleasant News—Reducing my Following—Troubles of the Roman Catholic Missionaries—A Hunting Expedition—The Mosquito Plague—Arrival of Hore at Mtowa—A Practical Joke—Unpromising Weather—On Board the "New Calabash"—A Twenty Hours' Pull—Kaboga Island; Narrow Escape of Carter and Cambier—Stormy Omens—Fighting the Tempest—Karema: Dangerous Approach—Meeting with Carter—First Station of the International—Ideal *versus*

PAGE

Reality—Militarism run Mad—An Ingenious Failure —Explanation of the Belgian Blunder—Story of Carter's Elephant Expedition—Interview with the Belgian Leaders—Vicissitudes of African Travelling —A Notable Dinner-party—A Surprise—How to Treat the Natives—Helping the Helpers—A Day's Progress—Hore and his Crew—A Change in Scenery, and its Geological Explanation—Mistaken Inferences Corrected—A Moment of Anxiety—Interesting Interview—Cheering Tidings—Threatened by the Wafipa—The Mystery Cleared Up—Toiling in Rowing—A Surprise Planned—Reckoning without our Host—Wild with Joy—Faithful Stewardship—Dance in Honour of my Return—Disappointing Discovery—Preparations for Homeward March 169

CHAPTER V.

FROM IENDWE TO THE COAST.

Once more on the March—Beauty in Distress—A Dilemma—A rash Impulse—Rejected—Valley of the Ilimba—Into Fipa—Arrival at Makapufi—Ceremonial Visit to the Chief—Spectral Royalty—Kapufi's Household—Characteristics and Customs of the Wafipa—Visit to Lake Hikwa resolved upon—A Royal and Obliging Guide—First View of the Lake —Descriptive Notes—Curious Problem—New Name Suggested—Hasting Homewards—Valley of the Mkafu—Lost in the Jungle—A Ragged Company—Arrival at Simba's—Unhappy Dupes—Keeping up Appearances—Majesty in Undress—History of Simba —Back to Beaten Tracks—Meeting with Cadenhead —A Tragic Mistake—Curious Cavalcade—Exquisites in Extremity—Too Wise to Succeed—Multiplied Misfortunes—The Wanyamwesi—Miseries of a Morning March—"Too Much Married"—Our Entry into Unyanyembe—A Sensation—A House with a History—A Pioneer of Civilization—State Visit to the

PAGE

Governor—Novel Trumpeters—An Arab Feast—Overflowing Kindness—A Barbarous Custom—Last Stage of our Journey begun—Ugogo—Amenities of Married Life—Mpwapwa reached—A Transformation—A French Explorer *hors de combat*—European Stamina *versus* Native—The Indian Ocean in Sight—Triumphal Entry into Bagamoyo—Review of our Enterprise—Return to Zanzibar—On Board for England 209

CHAPTER VI.

RESULTS AND REFLECTIONS.

The Slave Traffic—Its Exposure, Decline, and Present Condition—The Opening up and Civilization of Africa—The International Association; its Plans, Failures, and Prospects—The Livingstonia Mission on Nyassa—London Missionary Society's Stations on Tanganyika—Trade in Central Africa—Roseate Dreams—Mistakes of Travellers—Mineral Poverty of the Country—Scarcity of other Commercial Products—The Ivory Trade—Its early Collapse certain—The Transport Problem—Failures—The Elephant Experiment and its Fate—Possible use of the Camel—Roads for Transport: *Cui bono?*—Social Influences of Road-making 271

APPENDIX I.

Note on Mr. J. Thomson's Central African Collection . 293

APPENDIX II.

Remarks on the Shells from Lakes Tanganyika and Nyassa and other localities between the latter and Dar-es-Salaam 295

APPENDIX III.

PAGE
Notes on the Geology of East Central Africa . . . 299

APPENDIX IV.

Altitudes in East Central Africa between Pongwe and Makalumbi; from 317 Observations taken during the East African Expedition 308

INDEX 317

ILLUSTRATIONS.

Portrait of Mr. Keith Johnston, *to face* Title Vol. I.

Portrait of the Author, *to face* Title Vol. II.

Route Map *at end of* Vol. I.

Geological Map *at end of* Vol. II.

CHAPTER XVIII.

PAGE

Tom's Feelings Investigated—Wonderful Dream—Becky Thatcher Overshadowed—Tom Becomes Jealous—Black Revenge 164

CHAPTER XIX.

Tom Tells the Truth 176

CHAPTER XX.

Becky in a Dilemma—Tom's Nobility Asserts Itself 180

CHAPTER XXI.

Youthful Eloquence—Compositions by the Young Ladies—A Lengthy Vision—The Boy's Vengeance Satisfied 188

CHAPTER XXII.

Tom's Confidence Betrayed—Expects Signal Punishment 197

CHAPTER XXIII.

Old Muff's Friends—Muff Potter in Court—Muff Potter Saved . . 203

CHAPTER XXIV.

Tom as the Village Hero—Days of Splendour and Nights of Horror—Pursuit of Injun Joe 212

CHAPTER XXV.

About Kings and Diamonds—Search for the Treasure—Dead People and Ghosts 214

CHAPTER XXVI.

The Haunted House—Sleepy Ghosts—A Box of Gold—Bitter Luck . 223

CHAPTER XXVII.

Doubts to be Settled—The Young Detectives 235

CHAPTER XXVIII.

PAGE
An Attempt at No. Two—Huck Mounts Guard 239

CHAPTER XXIX.

The Picnic—Huck on Injun Joe's Track—The 'Revenge' Job—Aid for the Widow 244

CHAPTER XXX.

The Welshman's Reports—Huck Under Fire—The Story Circulated—A New Sensation—Hope Giving Way to Despair 255

CHAPTER XXXI.

An Exploring Expedition—Trouble Commences—Lost in the Cave—Total Darkness—Found but not Saved 266

CHAPTER XXXII.

Tom Tells the Story of their Escape—Tom's Enemy in Safe Quarters . 279

CHAPTER XXXIII.

The Fate of Injun Joe—Huck and Tom Compare Notes—An Expedition to the Cave—Protection Against Ghosts—'An Awful Snug Place'—A Reception at the Widow Douglas's 284

CHAPTER XXXIV.

Springing a Secret—Mr. Jones's Surprise a Failure 298

CHAPTER XXXV.

A New Order of Things—Poor Huck—New Adventures Planned . . 302

CONCLUSION 309

ILLUSTRATIONS.

	PAGE
Aunt Polly Beguiled	3
A Good Opportunity	5
Who's Afraid?	9
A Cautious Climb	11
Tendin' to Business	14
'Ain't that Work?'	16
A Motley Collection	18
Amusement	19
Paying Off	22
After the Battle	23
Not Amiss	26
Mary	27
A Floating Dream	28
A Cold Welcome	29
Using the 'Barlow'	32
The Church	36
Necessities	37
Tom Obtains a Prize	41
Tom as a Sunday-school Hero	43
The Morning Sermon	45
The Model Boy	46
The Church Choir	47
A Side Show	51
Result of Playing in Church	52
Wild-eyed Tom	56
Dentistry	57
Huck at Home	59
Huckleberry Finn	60
Tom Astonishes the School	65
Tom as an Artist	67
Interrupted Courtship	69
Vain Pleading	77
Tom Meditates	80
Robin Hood and his Foe	84
Death of Robin Hood	85
Tom's Mode of Egress	88
Tom's Effort at Prayer	91
Muff Potter Outwitted	94
Disturbing Muff's Sleep	101
A Suspicious Incident	106
Injun Joe's Two Victims	107
Tom Dreams	109
Aunt Polly Seeks Information	113
A General Good Time	116
'Showing Off'	118
On Board their First Prize	123
The Pirates Ashore	126
The Pleasant Stroll	133
The Search for the Drowned	135
Tom's Mysterious Writing	137
What Tom Saw	140
The Pirates' Egg Market	145
The Pirates' Battle	146
Tom Looking for Joe's Knife	152
A Hurricane	154
Terrible Slaughter	156
A Touching Service	160
Having a Good Time	161
Tom's Proudest Moment	162
Tom Tries to Remember	165
The Hero	169
A Flirtation	170
Becky Retaliates	173
Counter-Irritation	175
'It ain't a lie, Auntie'	177
Tom Justified	179

	PAGE
A Sudden Frost	180
Caught in the Act	182
Result of Tom's Truthfulness	186
Pure Enjoyment	187
On Exhibition	190
Prize Authors	194
A Bald Pate	195
Happy for Two Days	198
Enjoying the Vacation	200
Melon-Eating	201
Mother Hopkins	202
The Private Conference	204
At the Cell-Grating	206
Sprang for the Window	210
A King, Poor Fellow!	216
The Ha'nted House	221
The Greatest and Best	224
Business	225
Hidden Treasures Unearthed	230
The Boys' Salvation	232
The Next Day's Conference	236
The Haunted Room	241
Exploring the Cave	247
Huck on Duty	249
A Rousing Act	252
Result of a Sneeze	253
Cornered	259
Tom's Mark	264
Wonders of the Cave	267
Attacked by Natives	268
Despair	271
The Wedding Cake	274
A New Terror	277
The 'Turn out' to receive Tom and Becky	280
The Escape from the Cave	281
A Floating Corpse	282
In Search of Injun Joe	284
Caught at Last	285
Drop after Drop	287
A Business Trip	290
'Got it at Last!'	294
Tom Backs his Statement	300
Comfortable Once More	304
High up in Society	307

CENTRAL AFRICA.

CHAPTER I.

TOILING BY TANGANYIKA.

PAMBETÈ will be ever memorable as the spot where Livingstone first reached Lake Tanganyika, after his long and dangerous march from the coast. There he rested six weeks among the kindly and hospitable natives, to recruit his shattered health, and thence he set out to explore the great lakes to the west. At that time (April, 1867) Pambetò was a thriving and prosperous village, with its well-cultivated fields, its grove of oil-palms, and its fisheries.

When the East African Expedition reached it in the end of 1879 a blight seemed to have fallen upon the village, and it had almost dwindled out of existence. Ruined huts were its principal features. Those still habitable were occupied by a few old men, myriads of hateful insects, and innumerable rats. The chief, or headman, old and tottering, was wandering about in his second childhood, but still

cherishing some recollection of the great white man who first visited Pambetè.

Few oil-palms now remain; those trees having either been ruthlessly cut down during some war-raid, or killed by the rise of the waters of the lake—of which more anon. There is still, however, a little fishing done, as the natives are remarkably fond of fish.

The scenery around Pambetè is picturesque in the extreme. Seen from a distance the place has the appearance of a pretty landscape modelled in relief, and set in a niche cut out of the surrounding mountains, which rise, with their lower rugged talus and crowning precipices of red jointed sandstone, with much romantic effect. Over these mountains comes tumbling the river Eisè in a beautiful cascade. At their base is a small plain, formed by the detritus brought down by the stream, and varied by clumps of tropical forest, dense jungles, and open glades, dotted with fan-leaved palms. Here buffaloes, antelopes, and monkeys, roam or gambol unmolested. In front lies the lake, with its bordering fringe of dead trees, killed by the recent rise in its level, and then left standing out in the water on its subsequent subsidence.

Notwithstanding its picturesque position, however, the place is entirely unhealthy, and by no means a desirable residence. It forms a perfect oven, into which a cool breeze never enters; and from the swampy surroundings a constant malaria hangs over it.

On my arrival at this place, I was, like my great master, Livingstone, very much done up with fevers and hardships. I also, therefore, foolishly resolved to rest a few days to recruit myself, when I ought to have done so on the mountains. Preferring the coolness of the native huts to the flimsy tent, I bribed the chief to turn out of his for my benefit, and installed myself therein.

After getting my "traps" comfortably arranged, I went out to have a good splash in the cool water of the lake—a proceeding which resulted in an exciting sensation which I did not anticipate. Wading out a considerable distance, but not out of my depth, I observed what appeared to be a log of wood floating a short distance from me. Taking no notice of this, I went on laving the cool water over myself with great enjoyment. Looking up after a few minutes, I observed that the apparent log had floated nearer to me. Getting interested in its movements I examined it more closely. I made out the outlines of a crocodile's head, with its ugly snout, wrinkled skin, and glittering eyes. Fascinated by the sight, I stood for a moment motionless, and still it floated nearer. At last with a violent effort I threw off the enchantment, and regaining my presence of mind I made the welkin ring with a shout of "Mambo! mambo!" (crocodile). A considerable number of my men were near at hand, and my shout made them instantly aware of my position, when they saw me plunging desperately to reach the shore. Seizing their guns,

they rushed into the lake in a body, making the water boil most furiously. When they reached me, the crocodile was within a few feet, and would have seized me in another minute. But seeing the porters in such numbers, yelling and shouting and firing off their guns, it evidently thought that an empty stomach was better than a feast of bullets, and wisely disappeared, leaving a trail of blood behind. If I had been out of my depth at the time, my chance of surviving the *rencontre* would have been a poor one.

A more pleasing incident, however, marked my first day at Pambetè, and effaced the unpleasant savour of my fright. While lying in a half-feverish condition, trying to doze away the hot noon hours, I was much surprised to hear a strange hubbub. Yelling and shouting and firing of guns suddenly became the order of the day. Thinking that the village had been suddenly attacked by some enemy, I rushed hastily out of my hut, gun in hand; and there to my infinite amazement stood a white man! If he had been a ghost from the tomb I could not have been more astonished, and I seemed like one paralyzed. Smilingly the "great unknown" came forward, and according to the African salutation *à la mode* he touched his hat, and said, "Mr. Thomson, I presume?" Recovering myself somewhat, I replied, "Yes, that is my name; but, good gracious! who are you?" "My name is Stewart." Ah! thought I, a Scotchman, of course! But what on earth is he doing here?

And how did he come so unexpectedly? Can he have been sent by some one to bring me back, and, fearing that I would run away, determined to take me by surprise?

These and similar notions which flashed through my bewildered brain were soon dissipated. I learned that he was no such unwelcome emissary, but an excellent and energetic lay missionary from Livingstonia, at the south end of Lake Nyassa, who had come to explore the country between the two lakes, and to open up communication with the agents of the London Missionary Society, who were expected to be at the south end of the lake. On this errand he had followed my footsteps for several days, and had arrived only one day after me at the south end. I may mention as a pleasant coincidence, that exactly a year afterwards, on the anniversary of our meeting at Pambetè, I had the extreme pleasure of accidentally encountering Mr. Stewart in London, without having been aware that he had left Africa.

The effect of such a meeting upon me after my long weary months of isolation from civilized society cannot be expressed in words. With breathless interest I hung on every word he had to say; and the newspapers he brought with him were more exciting than any three-volume novel. I felt as if I had received quite a new lease of life.

It now became necessary to consider seriously what my future movements were to be. I had completed the task entrusted to Mr. Johnston, and which after

his death had devolved on me; and with all honour I might now have returned to home and civilization. But from this step my mind entirely revolted. To have reached after a hard battle the very centre of the unknown, and then to retire, while there was the possibility of increasing our knowledge, seemed to me the height of folly. Moreover by having carefully husbanded my resources, I found that still sufficient remained to allow me to do more work.

My thoughts turned longingly towards the Lukuga, the disputed outlet of the lake. The conflicting statements of Cameron and Stanley had only made the mystery more fascinating. Here was a problem which I could not leave unsolved. So I braced myself for this new effort.

My observations about the extreme south end and at Pambetè had led me to two conclusions: first, that the lake had risen with great rapidity after the visits of Cameron and Stanley, and had attained its greatest height in the wet season previous to my arrival, flooding large tracts of land, and killing the trees which fringed its shores. From this I concluded that Cameron's statement as to the Lukuga being the outlet at the time of his visit must have been wrong; otherwise the level of the lake could not have risen in the very rapid manner in which it certainly had done after that visit. My second conclusion was this: On the waters of the lake having attained their greatest height, a sudden lowering had taken place, to the extent of eight feet in as many months.

Everything seemed to me to indicate that it had suddenly found an outlet—probably the Lukuga—and by the rapid rush of waters had cut the channel deeper, thus lowering the level of the lake to the point at which we had found it. To verify this theory was now my greatest desire.

There was, however, another reason why I desired to go north. I had received no letters from the time of my leaving the coast. I was quite ignorant of what the Royal Geographical Society were thinking of my movements, and I was anxious to learn what instructions they had for me. My only chance of getting any communications was by going to Ujiji, to which I had directed letters to be sent.

After writing with difficulty a few notes while ill with toothache and fever, I prepared to leave for the north. Mr. Stewart occupied himself with taking a most valuable series of lunars, by which the longitude of the south end of Tanganyika has been satisfactorily fixed. On the 10th of November, after Mr. Stewart had generously supplied me with a few European luxuries from his own scanty store, we separated on our different roads—he for Nyassa, I for the Lukuga.

Crossing the river Eisè, our party commenced the ascent of the bordering precipices of the lake. The first part of my way led up an extremely rocky talus, formed of the fallen débris of the jointed sandstone cliffs, where we had to jump from boulder to boulder at the imminent risk of broken legs or sprained

ankles. As we ascended, the path became steeper and more rugged, till hands and knees had to be employed—the men alternately putting up their loads on some resting-place above them, and then clambering up themselves.

Half way up the ascent a sad spectacle met our eyes—a chained gang of women and children. They were descending the rocks with the utmost difficulty, and picking their steps with great care, as, from the manner in which they were chained together, the fall of one meant, not only the fall of many others, but probably actual strangulation, or dislocation of the neck. The women, though thus chained with iron by the neck, were many of them carrying their children on their backs, besides heavy loads on their heads. Their faces and general appearance told of starvation and utmost hardship, and their naked bodies spoke with ghastly eloquence of the flesh-cutting lash. Their dull despairing gaze expressed the loss of all hope of either life or liberty, and they looked like a band marching to the grave. Even the sight of an Englishman raised no hope in them; for, unfortunately, the white man has more the character of a ghoul than of a liberator of slaves, in the far interior.

Saddest sight of all was that of a string of little children, torn from home and playmates, wearily following the gang with bleeding, blistered feet, reduced to perfect skeletons by starvation, looking up with a piteous eye, as if they beseeched us to kill them.

It was out of my power to attempt releasing them. The most I could do was to stop them, and give the little things the supply of beans and ground-nuts I usually carried in my pocket. I, however, mightily enjoyed giving the rascally Mnyamwesi leader a good scare as he came fawning up to me. I looked unutterable things, and tapped my gun. He was out of sight in a twinkling.

Truth compels me to say that this was the first slave caravan I had yet seen in Africa, though that is to some extent accounted for by the fact that, till our arrival at Tanganyika, we had been travelling away from the usual routes. In Mahenge, I saw the warriors return from the mountains to the north of Zungomero or Kisakè with one slave captive; and in the same country I heard of one or two Arab slave caravans making a détour to keep clear of us. Then while at Sombe's, to the south of the lake, there was a band of slaves hidden in the town, but driven off during the night that I might not see them. About the lake, however, we had come upon the very centre of the slave-trade; and our after experience showed that all its well-known horrors are still prevalent, though not to the same enormous extent.

Resuming our climbing after a battle with my porters, who began to get tired and wanted to camp among the rocks, we reached the bottom of the sandstone cliffs. Taking advantage of the dried channel of a cascade, where numerous roots and

creepers grew conveniently, we gained the top after several hours' hard work, and were rewarded by a magnificent view of the south end of the lake, lying like a great picture 2000 feet beneath us.

The view to the west, however, was not so cheering. The country stretched out, apparently forest-clad, with few irregularities to vary the scene, till it reached the hills of Uemba in the east. The soil was sandy and barren, and too well drained by the underlying, much-jointed sandstones, to allow the growth of anything but the scantiest of vegetation. The apparent forest also proved to consist of nothing but stunted shrubs and trees, none of whose stems were more than eight inches in diameter. After two hours' marching in the hot sun through this uninteresting brush-land we entered the village of Setchè, where we encamped.

I sent a small present to the chief, according to custom; but it was returned, with the observation that I was probably not aware that he was a great chief, and that I must have made a mistake in sending such a paltry present. I represented that we were quite aware of his greatness, and were proportionately ashamed at being compelled to send such a small present, but we had travelled far, and my goods were dwindling fast away.

In reply, I was informed that the times were hard, and the late harvest had been very bad. He was extremely sorry to say that, in consequence, there was no food in the village for the white man's caravan.

Thereupon the porters raised a howl of dismay, as they thought of their empty stomachs; and bad names and unpleasant looks began to circulate.

Rather alarmed, and taken aback at this unexpected answer, I once more took the question of the present into consideration. I found, very much to my relief, that after all I could gladden the chief's heart with a suitable cloth. This immediately proved an "open sesamë" to the granaries of Setchè, from which poured abundance of food, as if the misfortunes of the late harvest had been suddenly remedied.

Next day we continued our march along this dreary Plateau, camping in the fertile district of Mkombola, and on the following day we once more descended to near the level of the lake, at the important Arab settlement of Iendwe, situated near the mouth of the river Lofu, where it forms a pretty lake-like expansion, bordered with richly cultivated plains.

Iendwe lies in a deep depression of the Plateau, densely inhabited by Walungu and Arab slaves gathered from various quarters. To the south the sandstone rocks rise in almost sheer cliffs 2000 feet in altitude. To the north there is a marked falling off in altitude, the hills being only some 400 or 500 feet high. Towards the lake this depression is further surrounded by low hills, through which the Lofu finds an exit by a deep, narrow, and tortuous gorge into Tanganyika.

We entered this important place with all the barbaric pomp and circumstance attainable in an

African caravan. A new English flag replaced for the time being the torn and tattered Union Jack which had led us from Dar-es-Salaam. The men donned their best, while in front I myself marched, surrounded by a brilliantly-dressed body-guard of head men, each carrying a handsome spear in his hand, and a gun slung on his back. In the centre of this assemblage of dazzling colours and imposing turbans, I presented a considerable contrast in my sober, free-and-easy suit of Tweeds and pith hat. I had only a stick in my hand, and I carried my azimuth compass at my side, instead of guns and revolvers. The caravan band, with its native drums, clarionet-like zomiri, and barghumi, or antelope horn, made an appropriate amount of noise as an accompaniment to the recitative of the fantastically dressed Kiringosis and the chorus of the rest of the porters.

Crowds of astonished natives lined the path; and at our camping-ground there stood a group of Arabs, in snow-white shirts and ponderous turbans, ready to welcome me with their "Salaams" and "Yambos." They were dying with curiosity to know where I had come from, and what my objects were. As the tents were being pitched, and the goods stacked, I sat down in the cool shade of a tamarind-tree, with an interesting circle of Arabs around me, while a crowd of natives surged excitedly about, in their eagerness to see the wonderful white man.

In deference to the polite questionings of the Arabs, I related the story of my wanderings, and many were

the looks of astonishment and wonder with which it was greeted. Another such march they had never heard of. Countries had been traversed which they themselves had abandoned for years, as being too dangerous to pass through; and yet everything had been done so quickly, without death or desertion among the porters, and without fighting with the natives; and, what was to them strangest of all, I had walked every step of the way, and had neither ridden donkeys nor been carried by my men. Hearing all this they stroked their long beards, looked wonderingly at my embryo whiskers struggling into existence, and unanimously concluded that God was great, and that I was a "Mzungu hodari sana" (a very strong and lucky white man).

When I next unfolded to them my plans for the future, and announced that I intended to go along the west side of the lake, a chorus of disapproval met the scheme. It was not to be thought of! No one ever accomplished it! One assured me that the mountains were impassable, and drew dark pictures of the misfortunes which had attended those who had been foolhardy enough to try the feat of crossing them. A second described the fierceness and ungovernable savagery of the natives, especially those of Marungu. A third declared there was no food, and we would all be starved. Not even the natives dared go such a road; and, moreover, the rainy season had already commenced, and the streams and rivers would be unfordable.

Though rather taken aback by these ominous assurances, I was not convinced, or turned from my purpose. "See," said I, "these good men of mine. With them I have scaled great and dangerous mountains. I have passed unhurt through tribes that you yourselves dare not go amongst. We have together crossed countries hitherto unknown. And yet there they all stand, without a break in their ranks. Shall I then be afraid of this new work? No; I am determined not to be baulked! If the mountain be difficult to traverse, I shall take light and easy loads. If there is little food to be got, I will take few men with me. And if the natives are dangerous, I shall make them my friends, and let them know that the white man comes with a different purpose than to make them slaves, and destroy their villages and food."

Upon this harangue of mine the Arabs only looked at each other in silence, amazed that I should insist upon such an aimless and useless waste of energy. With many ejaculations of "Allah!" they rose to depart, protesting with kindly warmth that whatever they had was at my disposal.

This interview shaped my plans at once. Iendwe was a populous place, with unlimited supplies of food. I therefore determined to leave all my men, except thirty, under the charge of Chuma; and then, taking only absolute necessaries in light loads, push on by forced marches to the Lukuga.

The prospect of real difficulties and an adventurous march quite animated and excited me, making me

commence at once the needful preparations. So, on the following morning, the men were collected by beat of drum, and my intention declared.

The rains had already shown symptoms of commencing. It would be necessary, therefore, to build a substantial waterproof house for our goods; and that was at once commenced. A suitable spot was selected, and a number of men began to prepare the ground. The rest of the caravan, headed by the drummer and piper, set off to the woods, to cut poles and make bark ropes. At midday they returned loaded, but singing lustily all the time.

The men entered into my schemes most heartily, and they worked as if it was a matter of life and death. In two days they had erected the largest house in that part of the country, and we were ready to start. The loads were speedily prepared, and it only remained that the *versonnel* of the travelling party should be determined.

As this trip was to be manifestly a dangerous one, I resolved to take only volunteers. The men were called up, and the question asked, "Who would go?" On the one side were perils and hardships; on the other, idleness and ease. The latter alternative was tempting to dispositions like the Waswahili. Yet no time was lost. First one, then another, and another, cheerfully offered himself for the enterprise, until it became almost a matter of competition who was to go. From the best of the caravan I was able to select the required number—thirty. Of this party Makatubu was made the leader, Chuma being left

behind in sole charge of all our remaining goods and men—a very tempting position to one who enjoyed acting the great man, and who was so well known for his gallantry to the ladies.

The district of Iendwe is, with the exception of Ujiji, the most important if not the most populous place on Lake Tanganyika. It is formed of twenty or thirty villages, lying along the rich alluvial plain which borders the lake-like expansion of the Lofu. The people are Walungu, and, like the rest of the tribe, are of a peaceable and industrious nature. An old man, now probably dead, named Chumanganga, was the chief of the villages. His heir to the chieftainship is a young man named Kapufi, who developed a great friendship for us, and rendered us much assistance.

The importance of the place, however, arises mainly from its connexion with the Arab and Wanyamwesi merchants, who have made it their headquarters, from which they prosecute their trading among the countries to the west—Uemba, Kabuirè, the neighbourhood of Lakes Moero and Bangweolo, and away to Katanga, from which a large amount of copper is brought, and bartered all over the tribes of the interior, who use it for ornamental purposes.

The traders are all in connexion with Unyanyembe, working either independently for themselves or acting as agents for the big Arab merchants of that important centre. Their mode of working is to settle down for a certain time at Iendwe with their wives, slaves, &c., cultivate the ground around their settlements, and

despatch trading and hunting expeditions to the still rich ivory and slave countries to the west. When sufficient of these has been collected to form a caravan, they are despatched to Unyanyembe by way of Ulungu, Fipa, and Khonongo. The settlement is left under the charge of a confidential slave till the return of the party from Unyanyembe.

A very large and important trade is thus carried on. Of the great arteries which meet at Unyanyembe, there are now but three of any consequence—the Karagwe and Uganda route to the north; the Manyema route to the west by way of Ujiji and Uguha; and lastly, the Kabuire and Uemba route, by way of Fipa, Ulungu, and Iendwe.

The fact that the trade in ivory and slaves now almost entirely depends on the distant countries to which these routes lead, suggests a woeful tale of destruction. Twenty years ago, the countries between Tanganyika and the coast were rich in ivory. Trade routes ramified through every part. Caravans came laden from Mambwe, Ulungu, Urori, Ubena, Ugogo, and Unyanyembe, and the more distant regions were scarcely known. Now these countries are completely despoiled. Over that vast region hardly a tusk of ivory is to be got; and as the slave-trade does not pay by itself, even that has dwindled down into insignificant proportions. To supply the demand for the precious article, the traders have to push further and further each year, and now only the most remote and central parts of Africa yield ivory in any abundance—if indeed

it can be said to be abundant anywhere; for be it understood the ramifications of the trade are enormous. No one country yields much ivory. It is by a process of infiltration, as it were, from a vast area that ivory finds its way to some common centre, such as Nyangwe in Manyema.

This ruthless destruction of elephants cannot continue long. They cannot be bred in a year or two, and when once destroyed in any region can never be replaced. The area in which they are still found is being gradually reduced. An iron band of ruthless destroyers is drawing round it; and it may be safely predicted that in twenty years the noble African elephant will be a rare animal.

I found it to be quite impossible to form the slightest estimate of the amount of trade in slaves and ivory which finds its way through Iendwe. The Arabs, jealous of my intentions, would give me no information; and I could gather no data from my own observations to give me any reliable clue. In all probability 1000 slaves and from 30,000 lbs. to 40,000 lbs. of ivory would be rather over than within the mark.

Of the horrors of the slave traffic I saw no sign, beyond meeting an occasional delinquent in chains. In every settlement I visited I saw only contented, well-fed people, leading an idle, lazy life.

The Arabs during my three days' stay at Iendwe were extremely hospitable, and loaded me with presents of fish, pounded rice, fowls, and eggs.

Coming from so many different donors, these presents were rather troublesome, as, in order to keep up my character, I had to give larger presents in return. Still I believe that their hospitality was genuine and not mercenary. These Arabs struck me as the most gentlemanly and courteous of men. They were never rude or intrusive, and always ready to anticipate my wants.

On the morning of our departure, they all arrived in a body to conduct us part of the way, bringing as a farewell present further supplies of food. It threatened rain, and I tried to dissuade them from coming; but this they would have considered rude, and go they would. Followed by my little band, we stepped out gaily, headed for a short distance by our musicians. All the other porters rushed along beside us, and would not be content till they had shaken my arm nearly out of its socket.

We had not gone above two miles when a thunderstorm came on, accompanied by heavy rain, which soon drenched the unfortunate Arabs, whose thin white garments clung like loose skin about their bodies. They, however, persisted in conveying me to my first camp, which was at the settlement of an Arab some distance up the Lofu, where we had to cross the river. This we at last reached, and got comfortably housed.

Early next morning the "Agnes" was unfolded, and in an hour we were all safely landed on the other side of the Lofu. We felt that at last we were fairly off.

It is impossible to describe the pleasant feeling of exhilaration which took possession of me on finding myself on the march with so small a band. I felt as if, free and unfettered, I once more roamed alone on my own Scotch hills. I revelled in the sense of deliverance from the soul-wearying cares and troubles of a large caravan, which, like an incubus, hangs round a traveller's neck, and stifles all pleasure by the anxiety it gives rise to. When he would prefer knocking about unfettered in this place and in that, in search of something new or fascinating, he must ever keep on beaten tracks, always suspicious, always watchful of his men, while endeavouring with as much minuteness as possible to comprehend his surroundings. But now, with only thirty good men and true, I seemed to have no anxieties or cares. So light of heart did this feeling make me, that I was tempted sometimes to execute a good Scotch dance for the benefit of the natives, in order to reduce the effervescence of my spirits.

On crossing the Lofu our route led up the face of the low hills, and struck away N.N.W. over a projecting headland to the inner termination of Cameron's Bay. I may here mention an incident which, though trifling in itself, threw a pleasant light on the character of the oft-reviled Waswahili. In my eagerness to get on, I had been walking too quickly for the loaded men to keep up with me. At last I halted, and fearing that they might have taken a different road, I began shouting most lustily, and firing off my

gun. In a short time I was surprised to see three of my best men coming rushing to the place in great excitement, with loaded guns, and looking as if they were pursued by an enemy. On inquiring what was wrong, I learned that they thought I had been attacked, and they had at once thrown down their loads, and run to my assistance.

In the afternoon we camped beside a long creek-like extension of the lake, beside a village which had been burned down by the Arabs for some offence. We had no food with us, but we contrived to make ourselves comfortable over two large antelopes which we shot.

Next day we reached Cameron's Bay, and camped at a place called Sumbi, the large settlement of an Mlima Arab. As I felt somewhat feverish, I took up my abode in a hut which was being built. Though roofed and thatched, the walls were only formed of poles, set a few inches apart like the bars of a cage. While such a shelter admitted the breeze and warded off the sun, I soon regretted the step I had taken: for throughout the entire day, the hut was surrounded by an admiring crowd eager to see me. A circle of eyes hemmed me in on all sides, noses pushed through the bars, in the eagerness of their possessors to get a good view of me. Greasy black hands were thrust in to feel the texture of my blanket or my clothes. In my feverish condition this was the height of irritation and misery. I asked them to go away, as I wanted to sleep; but it was of no use. I

yelled at them to "get out;" but they would not, and only laughed. I got my men to send them off; but they instantly returned. I became furious, and threw my boots and camp-stool at the intrusive noses; but these being timeously withdrawn, received no harm, and only a roar of laughter greeted my action. I then became sullen and resigned. I thought of myself as a wild animal caged, and wondered if creatures in the Zoological had the same feelings as myself, when surrounded by a crowd. Deep in such reflections, I covered my head with my blanket, clutched it convulsively, and finally fell asleep, exhausted by my excitement.

The Mlima Arab at the head of the settlement of Sumbi had been many years in the country, and being deeply in debt at the coast, could not return till he had amassed sufficient ivory to pay his creditors. He had come to Itawa (the country we were now in) by a somewhat unusual route, having passed through Khutu to Mahenge, then struck west through Urori and Fipa to Tanganyika, crossing by canoes to Pamlilo, the chief town of Itawa, from which, after staying a few years, he had removed to Sumbi.

About Cameron's Bay there were numerous evidences of the marked rise of the lake and its subsequent subsidence. The Arabs confirmed the truth of what we had been elsewhere told, that the rise had continued till the previous wet season, and then the water had suddenly fallen away. To observe the numerous

dead trees still standing out in the lake it might be imagined that the water was still above its normal level; but a more careful examination shows that the fact is due to the washing away of the soil about their roots.

Three very arduous and difficult marches along the rocky shores of the lake, up mountain sides, among rocks intruded through the sandstones, which they have smashed and broken till almost unrecognizable, across deep ravines, and along the top of a part of the Plateau, brought us to Pamlilo, the chief town of Itawa (the Akalunga of Cameron). On these marches, and at the places where we camped, we had various opportunities of observing the natives. They proved to be exceedingly interesting in their appearance and habits, they have remarkably well-made figures, and faces which were frequently very pretty, with small features, straight well-shaped noses, and thin lips, not at all like the negroes we usually see in England. Many of the girls were decidedly good-looking, with a certain piquant cast of countenance; while their colour was of that pleasant and agreeable shade which made dress appear quite superfluous.

Such enthusiasts as delight in muscular and well-developed limbs would find among these people much to draw forth their admiration; for in that particular the Waitawa are unrivalled among African tribes.

They shave their hair back from the brow, round which they wear a band of variously-coloured beads, with much tasteful effect. They either leave the rest

of their hair alone, or work beads into it. The men frequently dress it into various fantastic devices, such as antelopes' horns. The women wear enormous cylinders of wood in the lobes of their ears, and copper pins stuck in the most uncomfortable manner through their lips, and in the sides of their noses. Their dress consists almost solely of a flap of skin behind. The absence of this would be considered highly improper, although to me its only use appears to be as a protection from damp when sitting on the wet ground. As ornaments they wear copper rings and triangular bits of ivory.

When in the mood, it was one of my most pleasant entertainments to hold an evening reception, seated on my camp-stool, under the shade of a tree or the eaves of a hut. Round me would gather the old men, withered and worn, gazing with lack-lustre eye at the strange phenomenon before them. The young men and warriors would express their astonishment by eager looks, but trying to put on a certain air of bravado and carelessness.

Here and there the children, frightened and awe-struck, would shelter themselves behind the adults, and peer between their legs. As one thing and another was shown, my watch, compass, revolvers, portraits, &c., the excitement usually became intense. But the climax was only reached when, turning up the sleeve of my shirt, I showed them my white skin where not browned by exposure.

The most amusing part, however, was the behaviour

of the young girls—many of them perfect graces. These usually were to be seen in pairs, with arms placed lovingly round each other's necks or waists. I encouraged the approach of such with a paternal smile. Nudging each other, and giggling, they would advance with affected timidity to get a nearer view, every now and then starting off like frightened deer, to burst out in laughter and hold their hands over their mouths, as is their custom when astonished. Soon they would come back, and getting more confidence begin to examine me in detail. A wink, or perhaps a poke in the ribs, would bring our interview to a close, and they would bolt away, screaming with amusement at the intense humour and jocularity of the Mzungu.

Not to chronicle *in extenso* our movements through Itawa, let me describe our reception at Pamlilo, the village of the chief who is called Mlilo.

On the fifth day of our march from Iendwe I was as usual considerably in front of my men, who with their loads were not able to walk as fast as myself. The sky threatened a storm, which made me push on hastily to get under shelter before it broke. On approaching the village nobody was to be seen, the natives having taken refuge in their houses out of the rain, which by this time had begun to fall heavily. The place was by no means inviting, situated as it was on a point of land protected by a very high and strong stockade. This was grimly ornamented by a few hundred human skulls in all conditions, from the

freshly stuck up head to the bleached cranium, and all apparently snapping their jaws with enjoyment at the thought of a new companion, as the wind wheeled them backwards and forwards in their high perch. The ground outside was strewed with human bones, and it seemed as if the place was a veritable Golgotha. The weird effect of the scene was heightened by the absence of any living thing, the dark hue and threatening aspect of the sky, and the great stillness, broken only by wind among the trees and the sullen roar of the lake. My men were far behind, and for a moment I stood wondering what I should do. The rain, however, was falling fast, and there was no use being squeamish. So into the village I marched unnoticed, and finding out a hut with a broad overhanging eave I took refuge from the storm, waiting unseen till my men came forward, in order that I might appear with appropriate pomp.

I had been thus ensconced nearly ten minutes, when suddenly the stillness of the village was broken by a loud peculiar shout. This was almost immediately taken up from every quarter, until the very stones seemed to yell out the strange cry. Drums added to the uproar, while the women screamed, and the men were seen to hurry towards the gate, shouting and brandishing their spears. I was very much astonished at this; but, supposing it was simply the fashionable mode of receiving a caravan I remained still, expecting my men every minute. However the uproar continued without abatement, and my men did not appear.

Thinking there must be something wrong, I at last emerged from my cover. To my surprise and dismay I found the gates closed, and the stockade and crows' nests manned by an excited multitude, shaking their spears apparently at some enemy outside. It instantly flashed upon me that I was a prisoner, and cut off from my men. Clearly, however, my presence in the village was not known; for on my appearing among them so suddenly and unexpectedly every voice was hushed, and the once excited multitude stood still as if petrified. For a few moments we looked at each other, and not a word was uttered. I saw at once that I was supposed to be a ghost. Taking advantage of this superstition, and somewhat recovering my presence of mind, I struck an attitude, and like Hamlet's spirit moved forward with slow deliberate strides, and a severe expression of face. At each step the warriors recoiled in front of me. Struck with awe, they looked at me with staring eyes and open mouths in breathless silence. This was too much for me, and unable to keep up the character, I burst out with an irrepressible roar of laughter. The effect of that laugh was most astonishing. The amazed savages recoiled still further, and, but for the fascination which held them, they would have fled. The gate, however, was now free, and I was within a few steps of it. With one bound I reached it, and before they could recover their senses it was open, and I was outside, to the unbounded joy of my men, who were trembling for my safety.

I immediately despatched messengers to demand why they had received the great white man in this inhospitable manner, and I gave free vent to terrible threats. They were soon brought to their senses, apologized humbly, and explained the matter. My men were supposed, when seen, to be a war-party, as the custom of sending notice of our approach had not been attended to, and they had in consequence shut their gates. It afterwards appeared that some years previously a notorious Arab, named Kanenla, had introduced himself with a party into the village, under professions of friendship, and when fairly inside had treacherously attacked the people, killing many, making others slaves, and exacting a large ransom of ivory from Mlilo.

On these matters being mentioned, my feigned wrath was appeased. To show that there was no ill-will I went into the village, though the inhabitants had evidently not got over the feeling of trepidation with which I had inspired them.

I was rather surprised to find a tamed ostrich running about the village. It had been brought all the way from Unyamyembe, but for what purpose it would be somewhat difficult to say, as the natives rarely trouble themselves with the taming or rearing of animals.

Cameron speaks of Pamlilo (Akalunga) as the largest village he had seen in Africa. Between his visit and mine its glory must have departed from it, as I found it to be only a third or fourth-rate village.

A short time previous to the arrival of the East African Expedition, the Wa-emba from the west had invaded Itawa, and had besieged Pamlilo. This may account for its decay, as it certainly accounts for the numerous skulls which strew the ground and ornament the stockade.

As Mlilo was a potentate of some note, I gave him a handsome present. I was received for that purpose under the eaves of a huge circular granary, the roof of which was so large in proportion to the house it covered that it looked like an umbrella with a short and thick handle.

The reception was very imposing; indeed, it was the only case I had seen in which a measure of war-like display and discipline was observed. The chief reminded me very much of his royal brother Mlilo, of Inyamwanga. I was, however, treated very scurvily, and, as in Cameron's case, I got no return present. In fact, it was only with difficulty I got a guide.

The next two marches from Pamlilo led us through an unusually well populated and cultivated tract lying along the side of the lake, the high mountains here receding from the shores. On the third day we began the ascent of the higher ground once more. We were pleased to note the signs of a more abundant vegetation. The forests which covered the high grounds were formed of trees rising tall and straight. The rains, which were now of daily occurrence, were causing the fresh green grass and

buds to sprout forth, and the country had a character of fertility we had not observed since leaving the coast region.

We now approached the boundary of Itawa. The fact was abundantly indicated to us by the absence of inhabitants, the deserted villages and fields, which, for a distance of forty miles, marked the limits of the debateable ground. These marches were excessively severe, owing to the necessity of pushing on as fast as possible, the rains having fairly set in, and threatening to stop all progress. Rising at break of day we partook of some cassava, or Indian corn, accompanied by sugarless coffee. Then off we trudged in the chilly morning, pushing through grass from four to ten feet high, laden with cold dew which kept us thoroughly drenched for three hours each day. In marching we required to go with our arms held up before our faces, to ward off the blows of the rebounding stalks. Then a precipitous ascent would test our limbs and lungs, till, reaching the height of 2000 feet above our morning's camp, we would commence our descent on the opposite side, slipping and falling, ever in danger from rolling stones behind, which required us to exercise the utmost care and caution. Two men had been sufficient to carry our collapsible boat all the way to Lake Tanganyika, while, on this part of the march, it required eight men, and even then it proved such a killing load that twice I had my hammer out to destroy it.

Arrived at the bottom, we would vary our march

by plunging through a foul reedy swamp by a hippopotamus track, full of treacherous holes, into which we would unsuspectingly sink, with an electric shock to our nerves, squirting the foul contents on every side; then wading through a marshy stream, not unfrequently up to the breast or neck, we would commence the laborious escalade of another mountain, requiring the mutual assistance of the men to get their loads up. This was something like a fair specimen of the day's routine in Itawa. The strain told on the men very severely. Out of our thirty porters, there were never less than five *hors de combat.*

On the 25th of November we reached the river Runangwa, which forms the boundary-line between Itawa and Marungu.

We were very much amused at the number of wives our guide had scattered over the country. First one, and then another, was picked up by the way, till he became a man of much importance with his numerous following, carrying his mat, cooking pot, or other belongings. It appeared that this was his principal object in becoming our guide.

After three very trying marches over uninhabited mountains, rising to a height of from 6000 to 7000 feet, we reached the first village of Marungu, situated on a small stretch of level ground gained from the lake by the débris brought down by a large stream called the Lumbezi. The name of the place was Kapampa, from the chief of that name. We were all glad of two days' rest here, to

recruit ourselves, for every one of us was about dead beat. We were very hospitably received by the people, and, though food was not very abundant, it was at least cheap.

The chief, who had heard through our guide how badly we had been received by Mlilo, resolved to outdo him by giving us a very large present. This included a large fish, which was too oily to be eaten by me, but which supplied the men with capital material.

Much improved by our rest, we resumed our way northward. And now commenced a piece of work which for hardships, difficulties, and dangers, far surpassed anything we had as yet encountered—though we had had our share of hard work—and probably equalling anything recorded in the history of African travelling. We had now no gentle undulations and rounded valleys, but savage peaks and precipices, alternating with deep gloomy ravines and glens. Ridge after ridge had to be crossed, rising with precipitous sides, and requiring hands and knees in the ascent. Now we would go up 3000 feet, to descend as far, repeating the process perhaps three times a day, and never getting half a mile of moderately good walking ground.

The rainy season had fairly set in with all the fury characteristic of the tropics, and the very floodgates of heaven seemed to have opened to deluge the land; yet through the remorseless downpour we must march, hour after hour, and day after day. The huge rolling thunder-clouds overspread the heights, and

the thunder, with appalling roar, echoed and re-echoed on every side. Now it was above us—the lightning flashes ever and anon splitting the clouds open with their awful power. Then we were in the midst of it, with view circumscribed by the enveloping darkness, while the ground shook, and we instinctively cringed with dread as the gloom was ever and anon dispelled for an instant with blinding effect.

Pressing upward, we would next stand triumphant upon some savage peak, and look down on the incessant war of elements. And with what a wild exultant excitement did we watch the grand scene beneath! The rugged mountains and valleys, with the murky clouds rolling in dense masses around them; the swollen headlong torrents adding their monotonous roar to the ever-renewed thunder-peals; while the resistless wind whistled through the trees, bending them like straws.

In passing some of these streams we had to exercise the utmost caution to prevent being swept away, ropes having to be fastened on the opposite bank. On one occasion, a village boy crossing with us after dark lost his footing, and was never seen again. I shall always remember the strange scene this gave rise to. The news spread during the night among the mountain villagers, who poured out in crowds with the strangest half-cry half-laugh that can be imagined, till every valley and hill-top in the darkness seemed to give forth the weird chorus of lamentation.

Yet the savage and awe-inspiring grandeur of the mountain scenery we traversed in Marungu was not without its relief. Here the sun, darting his rays through a rift in the overhanging cloud-bank, would glorify as if with a golden crown some conspicuous peak, or smile upon some pleasant glade; and there glimpses of Tanganyika would be obtained, 2000 feet beneath us, its waters in the distance seeming as calm and undisturbed as the sleep of innocence. The atmosphere at this period of the year was remarkably transparent, so that the opposite side of the lake could be as clearly discerned as if only a few miles off, with its peaks, glens, and valleys sharply defined against the sky, even the very shades and colours being brought out distinctly. During the dry season, so dull and hazy is the atmosphere that not the slightest trace of the opposite side can be obtained.

The people of Marungu are in every respect different from the Waitawa, partaking much of the wild and savage character of the scenery. They are black, sooty savages, with muscular figures, thick everted lips, and bridgeless noses. Clothing was for the most part eschewed; and what there was of it was chiefly native-made bark cloth. There was no such thing as imported European cloth, at least among those living in the mountains—those down on the shores of the lake having a small trade with the Wajiji, who occasionally cruise round the west side for slaves and ivory. Goat skins, however, are most commonly used, worn simply over the back and shoulders.

The Marungu keep considerable flocks of sheep and goats, but do not milk the latter. Fowls also are abundant; and as the soil along the river side is usually good, and rain falls almost incessantly, vegetable food is raised to a large extent.

In most respects the existence of these natives must be of a truly miserable character, living as they do among grassy heights 7000 feet above the level of the sea. The soil is cold and clayey; and as the mountains, except where facing the lake, are entirely devoid of trees, fuel can hardly be got, so that they are compelled to eat their food generally uncooked, and they have to warm themselves as best they can. Necessity, however, constrains them in this matter to organize for the common benefit. As every family cannot afford a separate fire, there is a common meeting-house or shed in each village, with a fire always kept burning for the comfort of the men, the women not being admitted. In spite of these disadvantages the high mountains of Marungu are the most populous parts I have seen in Africa, probably owing to the fact that they can raise food throughout the entire year.

A curious fact relating to these Marungu natives is the prevalence of huge swellings in the throat among those dwelling in the high mountains, while those beside the lake are not afflicted with this disease. It is said that any one so troubled becomes cured in time by simply living on the lower level near the lake. Some even go so far as to say that

the patient only requires to look into Tanganyika to get cured.

The most notable characteristic of the Marungu is their extraordinary excitability. This was shown under various circumstances, and it placed our lives in constant jeopardy, from which we escaped only by the exercise of the utmost coolness and self-possession. It is specially noticeable among the mountaineers, who, broken up into small parties, live in continual danger of attack from their neighbours, or from the slave-hunting tribes around them. This fact, together with the hardships of their lot, and their entire isolation from all communication with traders, probably explains the annoying trait. Even the existence of the white man was entirely unknown to them.

My first acquaintance with their peculiarities was sufficiently alarming. It happened on the second day of our march from Kapampa. We had crossed the path which separates the deep gorge or valley of the Masensa from the more open valleys of the Lovu, and had attained an altitude of about 7000 feet. I was marching along in front with only my gunbearer, through an open country, with grassy undulating hills surrounding me, my thirty men being some distance behind. Suddenly a clear startling cry rang through the air from a distant height. No one was to be seen, and I stopped in surprise. Then another and another cry was uttered from different peaks, till the country echoed and re-echoed with the unwonted sounds. We had no difficulty in recognizing them as the Marungu war-cries.

We were not kept long in doubt as to the meaning of all this. From every mountain top, and in every valley armed natives sprang into view as if by magic, running from place to place and congregating at different points. Down from the heights the warriors came dashing at headlong speed, brandishing their spears and axes, and still filling the startled air with cries as if in great agony. It became only too apparent that we were the objects of their intended attack. At first my impulse was to take to my heels and get back to my men, but on second thoughts I refrained. They, however, seeing what was coming began to hurry up to my assistance. But before they could reach me, one party, headed by a warrior apparently mad with excitement, came dashing forward with axe uplifted, evidently intending to make short work with me. It was a critical moment, but I did not move. Opening my arms to show that I had no weapons, I shouted out the customary salutation, and declared ourselves "Wazungu" and friends. The leader of the band, now almost within arm's length of me, let drop his uplifted axe in amazement. He clearly had either not observed my appearance before, or if so, had taken me for an Arab, whom they had heard much of, but had never seen. As I stood there, apparently unconscious of danger, and without weapons of any kind, they seemed quite astounded, and doubtless concluded, as at Pamlilo, that I was something unearthly and "uncanny."

Before they quite recovered themselves my men

arrived, in great anxiety for my safety, and preparing to use their guns. I at once ordered them to put the boxes, &c., in a ring, and sit down; to keep cool and quiet, but to be ready for any emergency. The natives now crowded round us in hundreds, all still under the belief that we were Arabs, come to fight and make slaves of them; and yet with me walking between my men and themselves they felt they were facing an enigma and a problem beyond their comprehension. This, however, did not allay their excitement, though it prevented them from commencing the fight. With demoniac faces they yelled and shook their spears and bows and arrows. Dancing round about us with the wildest gestures, they incited each other to the attack. It almost seemed as if they were on red-hot plates of iron, so much did they writhe and wriggle like men in torture. Now and then some of them would go rushing away for some distance, and dashing themselves down on the ground, would roll about and bite the earth in the agonies of their frightful passion.

In such a pandemonium it was quite impossible to get a word in; and as it would evidently be some time before they were sufficiently calm to be spoken to, I told my cook to make some coffee, to console myself in the interim. At last our coolness had the desired effect, and we managed to make ourselves heard. I asked them if they had never seen or heard of the white man before. We came to make friends with them, and not to fight and get slaves. Did people

come with boxes and bales when they wanted to fight? If war was our intention, why were we now sitting peaceably among them? We were not Arabs, and had no dealings with them. "Are the Arabs of this colour?" cried I, showing my bare arm. That proved to be the finishing *coup*. I felt quite flattered at the shout of admiration which greeted the sight of my white skin, where it had not been browned by African heats and damps.

Matters being thus amicably arranged, we adjourned to the village after our three hours' detention, and were most hospitably treated.

Two days later an incident of a similar nature occurred, which placed me in even a more perilous position. We had had a long march, and as the day was considerably gone, we were compelled to camp at a very small village, in which we found only two old men left in charge. Their fears we soon allayed, and apprehending no evil, we settled ourselves down for the night. As sufficient food could not be got in the village, the men went off on a foraging expedition, leaving only four to guard our goods. While they were away, the villagers, having got some notice of our appearance, returned, and under the impression that we were Arabs, again enacted the scenes of the Lovu valley. This time we were only four against twenty—not a very large number if we had been inclined for fighting. But that was utterly opposed to my policy, and once more, unarmed, I stepped in front. For a moment the

clamour ceased. I looked steadily at the leader with my hat off, and said we were friends. He stood with a fierce and passionate face, in advance of his men, with his bow drawn to the utmost. A slip!—and a poisoned arrow would have been launched at me from within ten feet. Meanwhile the two old men whom we had at first found in the village did not cease interceding for us. The chief's face relaxed. He unstrung his bow, and I breathed freely once more, for the danger was past. We only required an opportunity to remove misconception as to who we were, to feel ourselves as safe as in any town in Britain.

In all their actions the Marungu showed the same excitability. They were always rushing to extremes. Their conversation was usually one continued scream, at the pitch of their voice, and an argument could never be carried on without the yelling and shrieking of half a dozen men at one time. On one occasion, when I was irritable through an attack of fever, they made such an unbearable din, that, unable to get them removed from the door of my tent by mild means, I scattered them by throwing my boots, water-bottle, and camp stool among them.

In all our marches through Marungu, I found it was necessary for our safety that I should be at the head of my men. My appearance usually so amazed the natives that we got an opportunity of talking to them, while if I had been behind or out of sight, they would have attacked us without parley. I found also here, as indeed with all the tribes, that

my strong point was to show complete confidence in the natives, and never to appear suspicious. It may seem paradoxical when I say that my immunity from personal attack arose from my habit of walking about alone, and without arms. This might be highly dangerous in a half-civilized country, but not so in a savage one. As savage tribes are ever at mortal feud with one another, and in constant fear of attack, they are compelled on all occasions to carry arms as an absolute necessity. Consequently, when they saw me walking about unarmed, sometimes actually miles from my men, they imagined I was something more than human, and had a great charm or "medicine" about me, and therefore that I had better be left alone. To appear suspicious, is simply to engender suspicion in the natives, and when suspicion exists there can be no mutual understanding.

During this journey I had an extremely nasty attack of fever, which stuck to me for three weeks. It was brought on by the severe mental and nervous strain, the constant drenchings and other hardships producing a disorganization of the entire system. Its worst symptoms were frightful headaches, which left me neither night nor day, and which were frequently accompanied by palpitation and difficulty of breathing. I became so ill and reduced, that I could have walked into the lake with the most philosophical resignation. Still I pushed onward, letting no amount of agony or weakness stop my daily marches. But I went like an automaton: I had

worked up my machinery to convey me to the Lukuga, and mechanically I moved towards it. I almost felt that in spite of death itself my bones must go marching along to the goal.

On the 6th of December we descended once more from the high mountain to a large open tract, which extends like an acute triangle into the Plateau, owing to a change of the geology—the low valley-like area being of soft friable sandstones, surrounded by the felspathic and granitic rocks of the mountains. At the village where we camped, namely, Kwamanda, there rises a very curious quadrangular hill of red sandstone, with perfect walls, or cliffs, on all sides, and topped with trees. It stands about 600 feet above the level of the surrounding country, and forms a marked feature in the landscape. The name of this curious monument-like hill is Malumbi.

As at Kapampa, we were compelled to stay and recruit a day or two. One of the men had become so ill with hæmorrhage that he had to be carried down from the mountain, and two days after he died.

A few hours after our arrival Manda, the chief, came to interview me. He interested me very much by his appearance and intelligence. His features showed very little of the negro, and he might have passed for an old Indian Nabob. When he sat down, or rose, he was saluted by a ringing shout from all the people. He made a lengthy speech, speaking in short sentences, at the pitch of his voice, making long pauses, throwing his arms about like a

windmill, and slapping his hands and thighs. He commenced by setting forth his greatness. Many caravans, he said, came to him to trade, and he received them like a king, giving them houses, food, and everything they wanted! He showed himself much interested in whatever was shown him, saluting each new object with a shout of admiration.

We found bark cloth still to be the common article of clothing. We were very much interested in some specimens of native handiwork, more especially their axes, which they ornament most artistically with brass and copper wire. The head of the axe-handle is very frequently carved, with wonderful taste, into the shape of a man's face. Their hoes are very large, and certainly not equalled in workmanship by those of any other tribe.

From Kwamanda we obtain a view of Ras Tembwe and Kungwe Mountain.

After being delayed a day by the death of Nasibu, the porter, we once more pushed ahead. Passing along the shore of the lake, we arrived in two marches at the base of a very high range of mountains, named Tchansa. In these marches we had crossed with difficulty three very considerable streams. But so adept were the men at fording such dangerously swift and swollen torrents, that on no occasion had I to record the loss of a single article, except once after leaving Kwamanda, when the cook lost the lid of our kettle, which he himself always carried as a mark of his office.

In scaling the Tchansa Mountains, rising to an altitude of 6000 feet, we passed through a most terrific thunderstorm. When in the midst of the cloud it became almost dark. So thick was the murky envelope that my men were perfectly appalled, and entreated me to go back. The guides, out of their wits with fear, fled precipitately; and, but for the fact that we were almost at the top of the mountain when the cloud suddenly descended on us, I myself would also have incontinently bolted, for I was thoroughly frightened, and expected every minute to be struck down. But it would have been as dangerous to return as to go forward; and though quaking at every blinding flash I pushed on, and soon, immensely to our relief, the cloud blew past and we were safe.

We camped that night at a small village, and once more had the difficult and dangerous task of enlightening an excited chief and his people as to who we were. As soon as that was done, everything went, as usual, "merry as a marriage bell."

During the night I enjoyed the excitement of a visit from a lion. There was no space in the stockade of the village for pitching my tent, so I had put it up outside, and gone to bed fearing no evil. During the night I was awakened by a peculiar sound, which I at last made out to be an animal sniffing. I listened breathlessly, and the sniffing was repeated, accompanied by a low growl, which froze the very blood in my veins. It could be nothing but a lion! I thought of defence, but alas! my revolver was—I knew not

where, and my rifle was not loaded, while all the men were sound asleep in the village. I was perfectly at the creature's mercy, and each moment I expected to see the tent rent to bits, and to find myself in the lion's jaws. I dared not shout for assistance, and I dared not move. I could hear my heart beat, while the cold perspiration stood in great drops on my forehead. In the intense darkness I fancied I saw its eyes peering eagerly at me, and I am certain I could hear it breathing. Convulsively clutching my clothes, I held myself ready to spring for my empty gun the moment the lion should tear open the tent, resolved to do my best in the unequal fight. In this horrid suspense I lay for an indefinite time, though it seemed ages. The lion was apparently uncertain what to do, and sniffed and growled, but could not make up its mind. At last, with feverish impatience I saw the first signs of dawn, and slowly—oh so slowly! did it advance. It seemed like a messenger with a reprieve from death while I was on the scaffold with the rope round my neck. The light came. The sniffing and the growling ceased: but I still lay quiet, till at last hearing a stir in the village, I tore out of my tent almost fainting. The soft ground around was beaten into a distinct track by the lion, the footprints of which were easily identified. Thinking that I ought to have grey hair after such a night, I examined myself in the glass, but found to my satisfaction that its hue was unchanged.

My midnight visitor, however, did not go without

a good meal that day, as a few hours afterwards an unfortunate native was carried off to the mountains by a lion, which probably was the same that perambulated round my tent.

The Tchansa Mountains form the northern boundary of Marungu, and on passing them we enter a district inhabited by a race of people widely different in character, appearance, and customs from those to the south. These are the Waguha, who occupy a strip of low-lying country along the side of the lake, extending as far as Mtowa or Kasenge, in latitude 5° 40′ S. Seldom or never making war, they live in the utmost comfort, in possession of an extremely fertile region, which yields food in great variety and abundance with almost no labour; and as they dress in cloth of their own manufacture, they have not a want which they themselves cannot supply.

The first important village we arrived at in Uguha was Mpala, on the river Lofuku. This village is memorable as the place where Livingstone returned to the lake almost dead, after his dreary detention in Kabuirè and his dreadful march through Marungu. Formerly Mpala was a place of much importance as the principal starting-point of the caravan route adopted by the Arab traders from Ujiji to Lake Moero and Katanga. Now that is stopped by the Wanyamwesi, who have settled themselves in Kabuirè on the line of route, and completely prevent the traffic. The only route left to the Ujiji traders is by way of Manyema and Urua, while the traders from Unyan-

yembe pass round the southern end of the lake, and reach Katanga, by way of Iendwe and Uemba. But there are difficulties also in this route, and as the way by Manyema is extremely circuitous, the trade in Katanga copper has languished considerably, and is now almost entirely in the hands of Wanyamwesi. Mpala is situated at the mouth of the Lofuku, which we found to be unfordable, though only eight yards broad. We had to cross by means of the "Agnes."

We were well received by the chief, who, however, insisted on our honouring him by staying a day. I protested against being stopped in that manner; but he silenced all arguments by asking me if I did not know that he was a great chief. Were we to pass him without stopping to eat his food, after having remained three days at Manda? He would consider himself insulted by such summary proceedings, and would infer that we were wantonly stepping on his corns (figuratively speaking).

From Mpala the country changes very much in its aspect. The higher altitudes of the Plateau recede from the lake, and take the form of a low range of hills, extending north and south, and at distance of from four to eight miles from the lake. The low ground between consists of rounded hillocks and shallow valleys, with flat alluvial tracts along the sides of the numerous streams, which wind lazily through dense jungles, impenetrable sedges, or cleared and cultivated fields of indescribable richness, producing

wonderful crops of Indian corn, millet, ground-nuts, sweet potatoes, voandzia, beans, and numerous other kinds of vegetable food.

Leaving Mpala on the 16th of December, we marched a considerable distance along shore, threading our way with much difficulty among the boulders and rocks. Striking more inland, we passed over much broken ground. We crossed three streams of moderate dimensions, flowing in deep glens over soft shaly and micaceous sandstone, and distinguished by profuse vegetation. Several miles to the west we could descry a magnificent range of bare rocky mountains, evidently more than 7000 feet in altitude.

We camped after midday at a deserted and burnt village—the first ocular evidence we had of the existence of a person who, from being an insignificant Uguha chief, had suddenly emerged from his obscurity in the west, descended like an avalanche upon the more peaceably disposed inhabitants near the lake, and swept off the entire population of thirty or forty thriving villages, turning the country into a perfect desert.

Next day, after a long tramp in a drenching rain through a charming piece of country, we reached the village of Tembwe, situated on the prominent neck or headland of the same name, and almost surrounded by the lake. Not suspecting anything, we entered the stockade without formal announcement of our approach, and ran ourselves into some danger in consequence. The place was packed with refugees from the

destroyed villages, and we had barely got inside when they turned out, *en masse* and threatened to kill us, under the impression that we were some slaving party. The hubbub was too great for our voices to be heard, though we yelled at their highest pitch, and made vigorous signs that we were friends. They crowded round us, and began hustling and pushing, using their weapons in the most suggestive fashion. With difficulty I kept the men from using their guns, though twice I had to make a show of shooting, to keep the angry natives off.

Fortunately we had command of the gate; and finding that bloodshed would result from a longer stay, we retreated to a neighbouring village, which we found deserted. We then sent our guide (who was an Mguha) to explain who we were. This at once put matters right, and the chief, Fungo, came himself to explain the blunder and beg pardon. I was very much pleased with Fungo's appearance, and we soon became the best of friends.

While fraternizing with the chief over a pot of pombe, I very much scandalized the natives by offering him a cup of the muddy mixture. He seemed perfectly thunderstruck at the idea, and a shout of dismay rose from the crowd, as if I had offered him a cup of poison. Very much surprised at the horror expressed, I asked what was wrong. I then learned that there could not be any greater breach of custom than for a chief to drink pombe in the sight of his people, more especially in the presence of women. I, how-

ever, insisted on his drinking; and he, willing to make peace with me, consented at last: but before doing so every woman was driven out of sight. The men turned away, not to see the awe-inspiring ceremony of drinking pombe; and finally, with much reluctance, as if about to do something perfectly unparalleled, he took the cup, looked fearfully around, and, hiding himself behind a sheet held up for the purpose, drank the pombe. The sheet was then dropped. The crowd once more breathed freely; the women returned in haste, as if they expected to find their chief dead, while he himself looked round as if conscious of having done a deed of extraordinary hardihood.

I was much pleased at the graceful manner in which he presented his own spear to me. I had remarked its neat and artistic shape and handsome shaft, when he, in a princely way, handed it to me with the remark, that if I liked to have it, it was mine. I mention this trifling incident, as it was the only instance but one in which I was spontaneously offered any article of native manufacture as a present.

Fungo, till within the last few years, had had a considerable number of villages under him. But, when we visited him, only one, Tembwe, remained; the rest having been burned or deserted during the raid of the Uguha chief already mentioned, who is known as Kambèlèbèlè, or "Swift-of-foot," though his proper name is Lusinga. Tembwe itself would have been destroyed but for the timely submission of Fungo, who made brotherhood with Lusinga.

This sanguinary potentate has established himself beside Tembwe, on a small bay, into which a large stream called the Luhanda falls, after passing through a rich plain. He has here built a large stockaded village, called Baliolima.

The day after our arrival at Tembwe we visited this redoubtable chief. We expected to find a typical royal warrior; but instead, a tall lubberly-looking native appeared, who suggested more the idea of a cowardly overgrown boy, than of a military leader who had depopulated the whole surrounding country with a very insignificant band of men. We stayed two hours with him, as he would not allow us to depart till he had prepared a suitable present for us. We learned that he had visited Unyanyembe, and had there learned the value of trade in slaves and ivory. To get a proper market for these, he had descended from his inland mountain and established himself on the lake, so that he might have uninterrupted communication with traders. But having thus opened a way for trade, he found that it was going to be of little advantage to him without something to traffic with. So taking whatever came to hand first, he made an onslaught on the surrounding villages, killed the useless old men and women, and made slaves of the others, thus establishing a lucrative "business" without much trouble, though the consequence was the depopulation of 200 square miles of the most fertile land in the interior.

In the afternoon we renewed our journey, and, con-

ducted by Lusinga himself, passed round the little bay and camped at a large village called Luhanda, from the stream of the same name. Our self-important guide enjoyed himself immensely, pointing out the wide area of rich Indian corn-fields he had laid waste and left to the wild beasts. He then accompanied us through the village, the inhabitants of which he had either killed or made slaves of, though he had left the huts untouched. Many of these huts were of large dimensions, and crammed full of Indian corn, which the spoilers had not thought worth touching. Through all the place lay the broken pots and other domestic utensils which they had amused themselves in smashing, by way of recreation after their more bloody deeds with the people.

Two more marches over pleasantly-wooded and picturesque country, and we entered the large Uguha village of Wanangia. The chief, Marutuku, paid us a visit soon after our arrival, and appeared as a jolly-looking and remarkably stout personage. Much to my alarm Makatubu offered him my slender camp stool to rest on; but fortunately he knew his own weight better, and did not accept it. It would certainly have instantly collapsed if he had sat down on it.

A hot spring occurs a few miles from Wanangia, but I was too weary and ill to visit it.

Next day, as I was unusually prostrate I remained to gain a little strength. Feeling wonderfully improved on the 23rd, I prepared to set out again, when I found that the men laboured under some grievance, and

refused to march that day. I had, however, set my mind on reaching the Lukuga not later than Christmas, and finding them obstinate I told them that they could just please themselves, but that I should go, though alone. Without more ado I made a small parcel of necessary articles, and prepared to depart. The men seeing that I was not to be intimidated by their threats gave in, and feeling very much ashamed of themselves picked up their loads and started.

A hard day's toil brought us to the village of Makagoya, where we camped after passing the tembe of an Mlima Arab, who, with a want of courtesy and hospitality that a pure Arab would have been ashamed to show, told us to move on when we proposed to stop there for the night. In the evening, however, the Arabs came to see us, and were then all smiles and pleasant words. We forgot their treatment in the excitement of the news they brought us. Four white men, described as French padrès, were said to be at Kasenge, and one had died. Who these could be I was at a loss to understand, but I concluded they must be Belgians with Captain Carter.

Next day we were all in the utmost excitement; for my interest in the Lukuga problem had become imparted to the men, and now we were to settle it, as we thought, before the sun set. We were, however, disappointed; for the men broke down with fatigue after a very quick march over delightfully varied country. We camped beside a small stream

among fan-palms, Upiñdu or Brab, screw pines, tall trees, and tangled creepers, among which we noticed, for the first time since leaving the low grounds on the coast, the mbungo, a species of landolphia, or East African Indiarubber-tree.

We had rain during the night, but the morning broke clear and bright. It was Christmas Day, 1879, and we celebrated the event by having a feast as good as circumstances would allow, and far superior to anything we had indulged in for many days. We had tasteless fish and sweet potatoes, cassava damper and a fried egg, honey in the comb, tasting very watery, and finally sugarless coffee.

But there was a greater feast in store for me, and such material joys seemed only a drag on its realization. After toiling for an hour over humpy, rounded hills, covered with tall trees and borassus-palms, we emerged on the edge of a hill ridge, and there at the bottom sped a noble river.

I stood for a moment as one in a dream. I had come primed certainly with the idea of finding the Lukuga an outlet to the lake, but expecting to see a swampy, lazy stream, winding imperceptibly among huge sedges, papyrus, and jungle tracts, the haunt of the crocodile and the hippopotamus, the breeding-place of innumerable waterfowl, ibises, storks, cranes, herons, kingfishers, &c. Instead of all this, I found an indisputable river, unusually free, for an African stream, of all vegetable obstructions, sweeping along between clearly cut banks and in a deep channel. I looked for

sand-bars, but there were none. I scanned the river as far as I could see for any signs of papyrus barriers, or reedy obstructions. Nothing was to be detected. The swift, resistless current and the sullen roar of cataracts appealed to my ear and eye with convincing power. There was no need of observations with portable levels, or of noting the course of straws, to prove that a fine volume of water issued from the lake, and hastened away westward to join the Congo, and finally the Atlantic.

When once I had fully realized this fact, I gave a hearty "Hurrah!" which was taken up by the men until the whole country echoed and re-echoed with our shouts. Then, unable to restrain myself, I tore down the steep bank through the dense vegetation, tripping and stumbling, until I stood at the edge of the river, panting, but triumphant. I realized that I had gained a prize worth all the trouble and hardship I had gone through.

Our next business was to get to the village of Manda, on the opposite side. It was manifest that the "Agnes" could never take us all over that day, owing to the breadth and swift current of the river, and its numerous swirling eddies, which made the working of any craft one of great difficulty and danger. We made signals for canoes therefore to the people of Manda. Two large ones came, and in two hours we were all safely landed on the opposite bank. I myself crossed over in the "Agnes;" but, though the sensation was somewhat novel and exciting, I

would not have cared to tempt Providence by making another similar venture in the same craft.

I had had some hope of being able to reach Kasenge, to enjoy my Christmas among white people, whether French, Belgian, or English, but I found that to be impossible. I therefore determined to get a canoe and descend the Lukuga a few miles. A suitable one was soon got, and off I joyously started.

The mouth of the Lukuga is in the shape of an acute angle, with the apex to the north and inland. Near the apex the river makes a sharp bend round to the west for a quarter of a mile, through a narrow gorge of soft, friable sandstone. It then widens to double the breadth of the gorge, with the banks shading gently from it, and turns away about N.W. The village of Manda is situated on the very edge of this gorge, with the houses looking as if they were attached to a precipice.

In our cruise down the river we had to keep as close to the banks as possible, as the men had no command of the canoe when once they got fairly into the current. All along the banks the evidences of the former level of the lake were abundantly shown in the marks on the dead trees. These marks are quite ten feet above the present level. On both sides were seen numerous traces of the former existence of a perfect sedge and papyrus jungle, which has been utterly swept away, leaving nothing but the roots, which, however, were rapidly springing up again in young shoots.

At last we arrived at the place where both

Cameron and Stanley found papyrus stretching completely across the river. The former represents it as simply floating vegetation, beneath which a current existed, forming the Lukuga river. The latter describes it as a barrier, blocking in the waters of the lake, which, however, had already risen to near its level, and were already beginning to trickle over, though in insignificant quantities. With a bold eye he looks away back, and sees that at some remote date, the Lukuga had existed as the outlet of the lake and that from some natural cause an interruption in the communication had taken place. With prophetic words he foretells that once more the Lukuga was about to resume its original function. The mud-banks, the sand-bars, the papyrus and other vegetable barriers, would be swept away, and a noble river would issue from the lake, and find its way to the Congo. He was too soon to see this consummation, and I was as much too late; but I arrived in time to realize the truth of the prediction.

All my observations lead to the conclusion that Stanley's examinations were accurate, and that he described the Lukuga as he found it. There is now ample evidence to show that the vegetation was not simply floating, but that there was a real mud barrier, which the waters of the lake rose above and ran over, and finally cut into a deep and narrow channel. Through this channel the Lukuga, with a rapid descent, roars like a mountain torrent, and not for any reward would the canoe-men venture into it.

Satisfied with what I had seen, we now commenced our return. We found it to be a work of difficulty, as the paddles proved quite useless in making headway against the stream. We had to pull ourselves along the edge by overhanging branches, wading where the water was not too deep. Once or twice we were caught by a swirl and swept round, only regaining the side after a hard struggle. I was much astonished at the vast shoals of fish to be seen in the river.

On my return to Manda I made every inquiry possible among the inhabitants regarding their knowledge of the Lukuga. They were unanimous in declaring that on the previous wet season the lake rose rapidly, and swept away the papyrus barrier and the sand-bar. Many of them had crossed the mouth of the present river on dry land. Some even spoke of a village which had been built in its very channel, but had to be deserted, owing to the rise of the water.

Reserving for the next chapter our consideration of the remaining problems regarding the lake's outlet, let us complete the story of our journey along the west side to Mtowa.

Passing round the Lukuga to its mouth, where it is marked by a broad level strip of dead trees on either side, some still standing, and others torn up and lying about in indescribable confusion, we struck more inland, passing through a pleasant country with numerous villages, each of which sent forth its quota of wild natives, who ran along beside us yelling with amusement and wonder.

From this we passed on to the magnificent alluvial

plain of the Lugumbu, crossing the river by a suspension bridge of poles and creepers. From the river to the hills near Ruanda we traversed acres upon acres of splendid fields of Indian corn, with rich uncultivated ground sufficient to feed the half of Africa. The rain fell in drenching showers, and made the fetid, slippery mud-paths almost impassable.

At noon we passed Ruanda, the capital of Uguha, and the weary men wanted to stop. But I was inexorable. On we went, up the steep outlying spurs of the Goma Mountains, and over a beautiful crystal stream, with beautiful ferns and curious screw-pines. At last we stood on the crest of the ridge, and a lovely view burst upon us, of islands and bays, villages, mountains, and plains. Altogether it was a sight such as is seldom seen in Africa.

With weary feet, but gladdened hearts and eyes, we continued our way. As we crossed the very summit the men stopped to gather grass, to cast on the already large heap thrown down to propitiate some evil demon and ward off harm. At last we reached the village of Mtowa. The men fired their guns, and yelled and shouted like madmen. I left them there, and inquiring my way to the "Nyumba wa Wazungu," I hurried forward. As I ascended the ridge on which the house is built, three people were seen descending. One was unmistakably a French Roman Catholic priest, in snow-white garments; but the other two could hardly be foreign. Uncertain how to salute them I simply raised my hat. Indeed I could hardly have spoken, as my

feelings were too much for me. My perplexity was soon pleasantly dispelled. A hearty shake of the hand, and a "How do you do?" told me that I had fallen into the hands of Englishmen, though who they *could* be very much puzzled me. I concluded that they must be Captain Carter's party; while they imagined that they had realized the dream of many people, and that they had "found" Stanley, fresh from the West Coast.

Thus mutually labouring under erroneous impressions, we began asking each other the most enigmatical questions, giving and receiving the most unintelligible answers, until we mentally concluded that there must be some mistake. Then, for the first time, I became aware that I was speaking to two excellent agents of the London Missionary Society; while they learned that, although I had apparently come from the west to Mtowa, I was not Stanley after all, but only an unknown individual, brought to that place by fortuitous circumstances, in command of the East African Expedition of the Royal Geographical Society.

The names of the missionaries were the Rev. Mr. Griffiths and Mr. Hutley The latter had come up the country with Mr. Hore, of Ujiji, in the first missionary expedition to the lake; the former had started under the leadership of the Rev. Dr. Mullens, in the third expedition, leaving Zanzibar about a month after the departure of the East African Expedition. On the road Mr. Griffiths buried his leader,

and then pushing on with remarkable speed, reached Ujiji without further mishap. Here a council was held with Mr. Hore to determine their future movements. It was decided as the result of that conference to establish a station in Uguha. No sooner thought of than put in action! The "New Calabash" was at once fitted out, and goods embarked, and off they started, reaching Mtowa in safety. Friendly relations were entered into with Kasengè, the chief. A piece of ground was acquired, a commodious house was built, and gardens were laid out; and there when I turned up I found everything as if occupied for years.

All these particulars I learned while sitting at a capital dinner, thoroughly enjoying the ample remains of a Christmas pudding, which the ingenuity of Mr. Hutley had contrived to produce. I also ascertained that the French priest was one Père Denaud, the head of a Catholic Mission in Ujiji and Urundi, who was at that time over at Mtowa on matters connected with the affairs of the Abbé Debaize, of whose disastrous expedition and unhappy death I then for the first time obtained the history.

And now, as we have got comfortably settled in the genial and civilized society of these hospitable missionaries, we may with profit pause in the course of our narrative and review the question of the lake's outlet. For while we have satisfactorily settled that such a thing exists, yet the explanation of the fact that there has at least been a suspension of circulation remains still in the region of debate and inquiry.

CHAPTER II.

THE LUKUGA AND UJIJI.

On the 13th of February, 1858, the Royal Geographical Society's East African Expedition, under Captain Burton, stands on the shores of Lake Tanganyika. With a power of collecting and sifting facts which has perhaps never been equalled by any traveller, Captain Burton lays down with surprising accuracy, from native and Arab information, the general character and features of the lake. He mentions the principal tribes inhabiting its borders, the largest rivers, the trade routes, and indeed foreshadows most of the discoveries of later explorers.

An interesting problem, however, faces that traveller. Here is a vast body of water without an outlet, and yet almost fresh to the taste. How is this to be explained? The salts carried into the lake by the numerous streams and rivers must accumulate as the water evaporates. In the nature of things one would expect, as in the case of the Dead Sea, that a lake under such conditions must become

saline. How comes it, then, to be otherwise with Tanganyika?

That the Lukuga did not exist as the lake's outlet at that time, may be accepted as a fact beyond dispute. Burton never appears to have heard the name. The Arabs seem to have been equally ignorant, which we cannot believe they could have been if there had been any outflow existing; for one of their trade routes to Marungu passes its very mouth, and another from Kasenge to Urua and Katanga crosses the bed of the Lukuga, about four days west of the lake. This route Burton himself describes, without mentioning the crossing of any large streams flowing west.

But though Burton notices the fresh taste of the water, he also points out that the natives do not care to drink it if other can be got, as "they complain that it does not satisfy thirst." In addition, it is spoken of as "corroding metal and leather with exceptional rapidity." To account for a case so unusual, he observes, "May not Tanganyika maintain its level by the exact balance of supply and evaporation? and may not the saline particles deposited in its waters be wanting in some constituent which renders them evident to the taste?"

In the year 1867, Livingstone also reaches Tanganyika. He, too, is puzzled by this curious problem in physical geography. On his return from Lake Moero to Mpala, on Tanganyika, he sails along the coast, camps for a night near the mouth of the pre-

sent Lukuga, skirts it in his canoe on the following morning, and yet hears nothing of it. Again he starts from Ujiji on his way to Manyema, passes within three miles of the channel of the Lukuga—and still it is not mentioned.

He stays long weary months among the Arabs at Ujiji, and with the problem still before him, doubtless makes frequent inquiries of his travelled hosts if they have never seen water flowing from the lake; but all in vain. Thinking that it may perhaps drain away to the Nile, he examines the north end in company with Stanley, only to find that there is no outlet there. In his eagerness to get some explanation of a matter so perplexing, he clutches like a drowning man at straws. Curious rumbling sounds are heard, as if proceeding from great caves, in a district near Goma (called by him Western Kaboga). These sounds he imagines to be produced by the water of the lake rushing through subterranean channels. But neither the caves, the sounds, nor Western Kaboga have ever since been heard of.

Thus Livingstone leaves the question where he got it, only making it still more certain that the lake had no visible outlet.

We next find Cameron on the pathway of discovery. Before he reaches the lake he is impressed with the idea that there *must* be an outlet somewhere to the vast amount of rain which falls in drenching torrents, forming large swollen rivers; and under this convic-

tion he commences his detailed survey of the lake's shores. He observes at the outset that the water has a decidedly peculiar taste, though it is not quite brackish.

Before he has well left Ujiji he is peculiarly favoured by the natives, who point out to him on the opposite side the position of the Lukuga, and describe it as the outlet. He sails round the greater part of the lake, and according to his own account discovers ninety-six rivers, besides torrents and streams. At last he gets to the Lukuga, and guided by a neighbouring chief, he goes down the creek till stopped by a barrier of vegetation. Observing, however, some waifs and straws setting towards the barrier from the lake, he somewhat precipitately throws his cap in the air, and concludes without further investigation that here at last is the outlet of Tanganyika.

Stanley is soon on his track. He, on the other hand, concludes that the Lukuga could not be the outlet, as the Arabs knew nothing about it. With this preconceived conviction in his mind, in spite of the assertion of Cameron to the contrary, he also reaches this interesting spot. Making a somewhat more satisfactory and minute survey than his precursor, he shows that though the Lukuga might have been, and probably would be in the future, the outlet, it was certainly not so at that time.

Both of these gentlemen, however, had noticed a new and puzzling phenomenon. The lake was rapidly rising in level!

In 1879 Mr. Hore, of the London Missionary Society, is stationed at Ujiji, and in the summer of that year the Arabs inform him that at the Lukuga water is actually running out of the lake. To verify this information Mr. Hore at once sets out in his boat, the "Old Calabash," and beyond doubt he finds a perfect outgoing torrent. The great question is thus once for all satisfactorily and indisputably settled.

I arrived myself to witness the genuineness of Mr. Hore's discovery at Christmas of the same year. By that time the level of the lake had fallen no less than eight feet.

Thus one great mystery had been unravelled. But there were other questions, quite as clamant, to be faced and answered. To the following three queries therefore I now turned my thoughts: Has the lake found an outlet for the first time? Or is the outflow intermittent? If so, what is the cause of this interruption in the outflow?

The first two questions are easily disposed of. I twice examined the bed of the Lukuga near its mouth, and, as the course of this narrative will show, I passed along its banks for six days—a distance of sixty miles or thereabouts. My observations have decidedly led me to the conclusion that a river of equal magnitude to the present Lukuga has formerly existed, and that consequently the lake has not found an outlet for the first time, but that there is an intermittent or periodical outflow.

The third and most difficult question still remains

to be dealt with: What is the explanation of this intermittent character of the Lukuga?

At present two theories have been propounded.

Stanley (whose ideas have all the dash and decisiveness characteristic of his actions) suggests that at some remote time only that part of Tanganyika existed which lies to the south of a line drawn from Cape Kahangwa in Uguha to Cape Kungwe on the opposite side. At that period, he supposes, the Lukuga existed as the outlet. A wonderful convulsion, however, took place, and a huge yawning gulf was formed, adding the northern half to the lake. Into this abyss, of course, the waters of the southern half poured, thus reducing the depth of the water one half, so that none could run out. Up till 1877-8 the numerous streams draining into the lake gradually raised it to its original level, and the Lukuga, when he (Stanley) visited it, was once more about to resume its old character of an effluent.

The theory is unquestionably bold and striking. But unfortunately the arguments with which he supports it are far from being either sufficient or satisfactory. His main argument simply amounts to this, that about the Lukuga the hills and surrounding country are very low compared with the rest of the lake mountains. This, however, is fully accounted for by the fact that that part is formed of exceedingly soft and friable sandstones, flanked to the north and south by hard and compact metamorphic rocks. The sandstones being more

easily denuded have been thus very much lowered in comparison with the flanking metamorphic rocks, giving the place the appearance of a gap.

The only other argument he brings forward is the existence of wonderful detached blocks of rock lying in chaotic confusion all along the east side of the lake. His brilliant imagination can only see in such the evidence of some great convulsion, rupturing the solid earth and producing indescribable chaos. A more sober mind perceives, even in these striking phenomena, nothing more than the slow hand of time, working by rain, wind, and rapid radiation.

I have examined both sides of the lake, and I must confess that I have seen not the slightest geological evidence to support the theory of the formation of the lake at two distinct periods.

The second theory, or rather suggestion, is that by Mr. Hore of Ujiji, who, writing about the frequency of earthquake shocks at Ujiji, asks if some variation of the level of the mouth of the Lukuga might not be produced by an earthquake. This I need not discuss here.

After a careful consideration of the questions involved, I have been led to conclude that under ordinary conditions the rainfall and the evaporation nearly balance each other; that there may occur a series of years in which the evaporation exceeds the rainfall, thereby lowering the level of the lake below that of its outlet; that a long period may elapse before it regains its former position; and that possibly

it may have to rise even higher than its former level before finding exit, owing to the rapid growth of vegetation in the marshy watercourse—thus prolonging the time when the outflow is suspended.

There are many facts which point to such a solution of the difficulty.

In the first place, since the Arabs settled at Ujiji there had been no outflow, and till within the last few years no marked rise in the level of the lake. To Burton the Arabs spoke of it as fluctuating simply with the seasons. Livingstone seems never to have noticed any rise, as he does not mention it. But from the year before Cameron's visit till 1878, the rainfall, according to native and Arab accounts, was much in excess of the normal amount. The consequent rise appears to have been very rapid, until the accumulated water burst through the vegetable barrier formed at the mouth of the Lukuga. Thereafter the lake fell nearly ten feet, and there was a proportionate diminution of the volume of water passing out. Indeed, so markedly was the amount of the outflow diminishing when I visited it, that between my first sight of it, and my second on my return from Ujiji, I saw a considerable difference.

In the second place, according to the observations of Mr. Hore, the normal rainfall in this region is remarkably scanty, considering its position in the tropics. Certainly it does not exceed an average of fifty inches per year. The very fact that I was able to travel during the whole of the wet season of

1879-80 without being stopped a single day by rain, affords ample corroboration of that statement. We can easily understand then that it can only be in exceptional seasons that the evaporation will be exceeded by the rainfall so as to permit a perceptible rise of the lake's level.

In the third place, let the reader examine the map accompanying this book, and he cannot fail to be astonished at the remarkably small area of land which this huge lake drains. Cameron indeed declares that in his sail round the south end, he discovered no less than ninety-six rivers, besides innumerable streams and torrents. It would be interesting to learn how that traveller defines a river; as I have walked all round the southern half, crossing all the rivers and streams, and yet have been unable to make out more than an insignificant fraction of the number he mentions. Those that I thought worthy of the name are the Ruche, Malagarazi, Luguvu, Musamwira, Kilambo, Lofu, Lofuku, and Lugumbu, and with the exception of the second they are all very small rivers. The other "rivers" of Cameron are simply small streams or mountain torrents draining the lakeward face of the mountains, and dried up, or almost so, during the dry season. The average size of the rivers mentioned, with the exception of the Malagarazi, is about twenty-five feet broad, and six to twelve feet deep. In the dry season the measurements will not be half so much.

With these facts before us, the necessity of Tangan-

yika having a regular outlet is not so apparent as it seems to have been to Cameron. Neither need we, like Stanley, invoke the aid of great convulsions to account for the interruption or intermittency of the outflow. The phenomena are sufficiently accounted for by the facts I have enumerated, viz. (first), that since the Arabs settled at Ujiji till within the last five years there has been no very marked rise in the level of the lake; (second), that the rapid rise of the lake after that time was due to unusually wet seasons; (third), that the normal rainfall is less than fifty inches in the year; (fourth), that Tanganyika drains a remarkably small area of land, and has only a few insignificant rivers, torrents, and streams falling into it; and (fifth), that the volume of water passing out by the Lukuga is diminishing so rapidly as to be markedly noticeable in two months, even in the course of the rainy season, so that quite possibly the next traveller may arrive to find little or no water leaving the lake.

These considerations, then, as well as all my inquiries and observations, lead me to conclude (first), that under normal circumstances, the rainfall and evaporation nearly balance each other; (second), that many years ago a series of unusually dry seasons reduced the level of the lake below that of its outlet; (third), that it remained sufficiently long without circulation to become charged with salts, which have given the water a markedly peculiar and unpleasant taste, unlike that of ordinary fresh water, and also an exceptional power of corroding metal and leather;

(fourth), that unusually wet seasons set in some five or six years ago, raising the level of the lake; (fifth), that it rose above its normal level, owing to the formation of a barrier in the bed of the Lukuga by rapid vegetable growth, and the depositing of alluvium by the small streams descending from the slopes on either side; and (sixth), that the lake having once overflowed the barrier, soon removed it entirely, thus regaining its original channel and level.

After this digression, we may now resume the narrative of our journey.

When I left Iendwe it had been my intention to go to the Lukuga and return directly. I carried with me such goods as I calculated would be required for such a journey. Our progress was much slower than we had expected, owing to the enormous difficulties we encountered among the mountains. Hence when we arrived at the intended terminus of our march our stores had run short, and would not suffice to take us back. It therefore became necessary to go on to Mtowa or Ujiji, to lay in further supplies. This I was all the more anxious to do, as I expected letters from the coast *viâ* Ujiji.

On reaching Mtowa, I found that the missionaries themselves were but poorly supplied with stores, and could not assist me. I therefore determined to visit Ujiji. Such a trip promised to give me much pleasure, connected as the place is with every memorable expedition of discovery which has left the East Coast. I heard also that the men I had sent to Zanzibar from

Ubena had arrived with letters for me. A boat was every day expected from Ujiji, and I waited its arrival with impatience.

Camped at Mtowa, we found a huge caravan of ivory and slaves from Manyema, awaiting, like ourselves, means of transport across the lake. There were about 1000 slaves, all in the most miserable condition, living on roots and grasses, or whatever refuse and garbage they could pick up. The sight of these poor creatures was of the most painful character. They were moving about like skeletons covered with parchment, through which every bone in the body might be traced. It would be difficult to say what appearance they might have had if properly fed, but as we saw them they looked most ugly and degraded savages, not one whit more prepossessing than those we had met among such tribes as the Wakhutu, the Wapangwa, or Wanena. Livingstone describes the fine appearance of the Manyema in glowing terms. But assuredly the specimens we saw at Mtowa little deserved to be highly spoken of. Probably, however, the slaves were the riff-raff and criminals of the tribes, sold to the Arabs for some misdemeanour.

We learned that they had had a frightful march during which two-thirds fell victims to famine, murder, and disease; so that out of about 3000 slaves who started from Manyema, only 1000 reached Mtowa. Of those remaining, 600 belonged to the renowned Tippu Tib, mentioned by Cameron and Stanley. The poor wretches were carrying ivory to Ujiji and

Unyanyembe, to be there disposed of, along with themselves, for stores to be taken back to Nyangwe.

It was reported that Tippu Tib, with his enormous accumulations of ivory and slaves, was about to commence his return to the coast as soon as the necessary stores reached him. He proposed to march by force, sweeping everything before him, and taking whatever he could lay his hands on. He would pass through Urua by the eastern side of the Lualaba, through Kabuirè, round the south end of the lake, and then cross Usango and Uhehè to the coast. It is highly improbable that ever this bold scheme will be carried into effect. Ruin and destruction would be the fate of such an expedition, if attempted. It is more than likely that Tippu Tib will never leave Manyema.

I was very much pleased with the Arabs at the head of this caravan. They certainly were not the brutal monsters we would be inclined to imagine on learning that they left their slaves to die of starvation, or to live on roots and grasses. At the risk of being misunderstood, I cannot but describe them as most courteous gentlemen, with as humane and kindly feelings on the whole as are found in the average European, but who have been accustomed from boyhood to a most abominable traffic, in which their traditions and customs said there was no harm. They looked upon such of their slaves as they bought and sold, simply as an European would look upon pigs or horses. If the latter was unable to give his animals

food, he would naturally regret to see them die of starvation, but would feel the loss to his pocket more. And so it was with these Arabs. They regretted to see their slaves perish of hunger; but as food proved to be so dear, they could not afford to buy them any, as it would have absorbed more than their money value. Hence they were left to starve, without the slightest idea that an inhuman action was being committed.

During my residence in Africa I never saw an Arab cruelly ill-using any of his slaves. He may leave them to die; but he never (I refer, of course, to the better class of Arabs) condescends to murder, or commit the savage cruelties which we sometimes hear so much of. With his domestic slaves he errs rather on the other side. They are kept more for show than work, so that they grow up like so many lazy, pampered puppies, who do very much as they please, and speak to their master with a very considerable amount of republican freedom.

With the Arabs at Mtowa we had many interesting conversations. Like those we met at Iendwe, they were very much surprised at the strange road by which I had come. They showed a most comprehensive and intelligent knowledge of the geography of a very wide area. From them I learned that the first outburst of the Lukuga had produced a great flood in the Congo, sweeping away villages and drowning the inhabitants.

New Year's Day, 1880, was marked most appro-

priately by a very cheering circumstance. My long-looked-for letters arrived—the first I had received for eight months; and as they contained nothing but pleasant news, I felt proportionately delighted. In a letter from Dr. Kirk a great weight was taken off my mind, by the expression of the Royal Geographical Society's approval of my movements after my leader's death. I had had grave doubts of what they would think of the step I had taken, but I could now breathe freely.

The men who brought the letters had a strange story to tell. They had been attacked by robbers in Ugogo, who carried off all the cloth and articles of barter which they had, leaving them, however, the letters and their guns, one of which they had to sell to buy cloth to bring them to Ujiji. This was rather trying to many of the porters, to whom they were bringing articles from the coast.

The true story we heard on our way back to Zanzibar, and it reveals the murderous character of the Waswahali when under no control. After leaving Mpwapwa, the mail-men were joined by an Msagala and his wife, who wanted their protection in passing through Ugogo. One of my men took a fancy to the woman, and indignant at the idea of an Mshenzi (wild man) having a wife to do his work, while he, an Mgwana (free man), had no one to carry his mat and cooking-pot, resolved to become possessed of her at any price. So, one day, on the confines of Ugogo, he beguiled the husband into the forest and coolly shot him.

Some Wagogo, hearing the shots, ran to the place, and found the Msagala, who told them what my man had done. They at once seized him and his comrades, and as blood had been shed on their ground by strangers, and without their consent, they confiscated all their goods, and—strange justice—made the murdered man's wife a slave.

The boat which brought my letters was about to return next day with Tippu Tib's headman, Bin Ali, and a cargo of slaves. This pleasant young Arab offered us a passage, which we at once accepted, as our own boat had never arrived.

At noon of the 2nd January, accompanied by Père Denaud and my servant—the rest being left behind under the care of Makatubu—I went down to the shore. The sight of the loaded boat rather made us regret our decision. Its dimensions were about twenty feet long, eight feet broad. It had no deck, and only a little boarded space at the stern. Into this insignificant craft eighty slaves were crammed, between and beneath the seats and into every odd corner, until it became one frightful seething mass of human flesh, as solidly packed as tinned meat. On the top sat six or seven favoured women slaves of Bin Ali. The seats were occupied by Waswahili and Wajiji boatmen, who in rowing set their feet against the slaves. On the boarded space at the stern, where there was comfortable room for three persons, eight of us were packed. We had to sit bolt upright without the possibility of moving, and under a broiling sun, not the slightest

awning being interposed to ward off its fierce rays. The odour from the sweating and groaning mass of slaves was most sickening, and I wondered how many would be dead before we reached Ujiji, or what the consequences would be if a squall rose and produced a panic among them.

Somewhat dismayed by these reflections, yet not liking to draw back, we went on board, got squeezed into our places at the stern, doubling ourselves up for the purpose, and there we reflectively sniffed our knees and resigned ourselves to our fate. When we got outside the islands we found the wind unfavourable, and as a crossing is rarely attempted except under the most propitious circumstances, we put back into a long narrow inlet in the island of Kivala, where we stopped for the rest of the day. The good Father and I tried to look cheerful over some Indian-corn porridge and cold fowl; but seeing Bin Ali preparing some savoury curries, we ate as little of our own poor fare as possible, under the expectation of enjoying the hospitality of the Arab. Nor were we disappointed. A huge basin of rice and a bowl of capitally curried fowl were sent to us, which we discussed with much enjoyment and profit.

About midnight, the wind having become more favourable, the slaves were once more repacked; we resumed our own awkward position, the boatmen pulled out from the charming inlet with the intention of crossing the lake.

On losing sight of the islands in the darkness our

captain also "lost his head," and having no compass he steered he knew not where. After some difficulty a light was struck, and on our pocket compasses being examined we found that we were going due S., instead of E. or N.E. The captain, trying to put matters right, went as far the other way, and when next the compass was examined we were going N., then W. Père Denaud became wrathful at the stupidity of the steersman, and invoked the anathemas of various saints on that black individual's head. He in turn likewise became angry, and finally gave up all attempts to go forward; so we lay-to till the morning. When day broke we found ourselves still close to the islands.

Abandoning the plan of steering straight for Ujiji, they now turned the boat's head to the opposite conspicuous peak of Kabogo. During the day the wind fell calm, and as the sky was cloudless we had a wretched experience, stuck up in our cramped position, unable to move. What the poor slaves felt it is impossible to conceive.

About three p.m. we reached the harbour of Mshehazi, notable as the point from which both Speke and Stanley started to cross the lake. Here we landed to prepare some food. We made a great show of cooking again, but prudently refrained from eating much, our abstinence being again rewarded by more savoury messes from our good friend Bin Ali, on whose head we invoked blessings.

We were hardly well landed when a capital breeze

sprang up, but with the characteristic carelessness of the native mind they never thought of taking advantage of it till it began to grow dark. On going down to the boat we were much alarmed to find that the boatmen had occupied their time loading the boat with firewood for Ujiji, where it is rather scarce. With much swearing and thrashing the slaves were stowed away, now in a worse position than before. The boat was dreadfully overloaded, and the sea was rising, while the sky portended a storm. The Father said a prayer and told his beads before going on board, and full of gloomy forebodings we started.

As soon as we were fairly outside in the swell of the lake, the old boat began to rock in a manner which every moment threatened a capsize, the Manyema, who had never experienced anything like this, showed signs of fright, and but for the fact that they were sat upon and threatened with sticks, they would have risen in a panic. Bin Ali's sallow visage betrayed terror; Père Denaud groaned, and told his beads; some of the women screamed; while I gave myself up for lost, but kept my thoughts to myself. The boatmen lost their wits. They could not put back to Mshehazi, and there was no other shelter for some distance. So we were compelled to go on. After two hours' sailing we at last reached a somewhat sheltered nook, into which we pulled, and anchored for the night. Every one, with the exception of three of the crew, the Father, and myself, went on shore as being the safer place. We then stretched ourselves

comfortably on the half-deck, and thinking everything safe we went to sleep.

At midnight we were awakened by a terrific hurricane. The wind had shifted, and from a brisk breeze had changed into one of those frightful squalls so characteristic of Tanganyika, and now it was blowing us right on shore. It was pitch dark, and the beach and forest could only be descried during the brilliant flashes of lightning, which came in quick succession, accompanied by appalling roars of thunder. The breaking of the huge waves told us that we were too near the rocks for our safety. The sailors on shore could not come off to assist in keeping the boat right, and their cries came only inarticulately to our ears.

The storm increased, and the anchor began to drag, and in a few minutes we were bumping among the rocks as the huge waves passed through beneath, broke, and receded. Every moment we were threatened with destruction. But fortunately the constant gleams of lightning revealed our position to those on shore. They at once perceived that the only hope of saving the boat lay in meeting it with their whole strength as each successive wave came rolling in. The lightning showed each wave as it approached. Into the waters then ran the eighty naked savages, their wild yells harmonizing with the scene. As the advancing wave caught the boat and appeared to hurl it on the rocks, the full energy of the men was put forth to keep it back. Then as it passed

beneath, it caught the negroes, and, as if in revenge for being frustrated in its destructive design, swept them off their feet and rolled them over and over. Thus the grand battle between man and nature went on, with varying success. Now the waves, anon the men, seemed to get the better. Those on board had to devote all their energies to keep the boat from being taken broadside, as there would have been no hope for her safety if such a thing had even once occurred. Several times this nearly happened; but in every case she was caught at the proper moment and righted.

The combat, however, could not continue long, as the men were getting exhausted, and many were much bruised and cut by being dashed among the rocks. The boat also was fast filling, from the successive waves which broke over her. There was not much fear for myself, but I was in utmost anxiety for the safety of my maps and diary, which I had in a box. I sat clinging to this as a miser would to his bag of gold, as I saw no hope of saving it if the boat went to pieces. At last, when all hope of safety failed, I got a brave fellow named Juma, well known as Cameron's personal servant, to try to rescue it. Taking advantage of a slight lull and the recession of a wave, he made a gallant rush for the land, just narrowly escaping the next roller. A flash of lightning revealed him with the box on shore, and I then felt composed in the consciousness that *it* at least was secure.

For another hour the storm continued, but, after that, gradually the wind fell away, and the sea became less rough. Of this we gladly took advantage, and with one grand united push the boat was got into deeper water and once more anchored.

Throughout the whole night the thunder and lightning continued without abatement. The rain descended in torrents, and there we had to sit, like drowned cats in a perpetual shower-bath, till the morning.

When day broke we all presented a most sorry spectacle, with nothing to eat, every article drenched, and every one exhausted. It was found impossible to embark the men where we were, so we steered round into a beautiful long narrow inlet, where the negroes were once more stowed in their places, and we set sail for Ujiji with a favourable breeze.

From Kaboga northward the land along the lake presents a scene of pleasing variety. None of the grand peaks and precipices of Marungu or Ulungu, but hill and dale, with rounded well-wooded slopes, which only require a little more variety in colour to remind us of an English landscape. However, the uniformly green tint, the absence of open glades or cultivated fields, and the apparent non-existence of any living creature, give it a character of monotony and deadness which soon wearies the eye.

It is markedly noticeable that wherever the shores of the lake are low, or a wide vllacy extends away into the subtending Plateau, there the rocks are of

soft, easily denuded sandstone. This fact seems plainly to indicate that the irregularities of the interior Plateau are due to denudation wearing away the softer sandstone faster than the metamorphic rocks which stand out in great mountain masses, like those of Marungu or Kungwe.

In the country from Mpala to Mtowa this is very evident, as also from Kaboga to the north of Ujiji. The same thing appears in a small tract north of Kungwe, and in the country about Manda and Iendwe.

It is also observable that all the rivers which have any length of drainage basins run through the sandstone areas. Of these, the Ruchè, Malagarazi, Lofu, Lofuku, and Lugumbu, may be mentioned. I am inclined to entertain the idea that at a date anterior to the Carboniferous Period one immense lake covered the entire "Lake Regions," including the whole valley of the Congo, to the West Coast ranges. In these circumstances would be deposited the sandstones which occupy a large part of that area. In process of time a channel was cut by a river, or formed by some convulsion, which drained off the water, leaving only great sheets in the deeper hollows, and forming such lakes as Bangweolo and Lake Moero.

Tanganyika itself, however, seems to have been originated subsequently, by the formation of a great depression. On no other theory can we understand how such a long narrow trough could be produced, with its immense depth and the precipitous moun-

tains round it, traversing all kinds of rocks indifferently. The fact that a large number of the lake shells are markedly marine in their character would seem to show that up till a recent geological era the waters were saline, but subsequently became freshened by the formation of the Lukuga through the denudation of the soft sandstones of Uguha, which caused a circulation, and carried off the salts. The distinctly marine character of these shells can hardly be accounted for by any other supposition.

This subject, however, requires to be approached with caution, as our knowledge of the geology, geography, and natural history of these regions is as yet too meagre and limited to allow any one to theorize with confidence. I simply throw out these observations as hints worthy of the notice of future investigators.

At sunset we came in sight of the ridge on which Ujiji is built, but it was quite dark before we approached the landing-place. There was a considerable swell on, and in the darkness the boat was run aground in a most exposed place before the men knew well where they were. A huge wave struck the boat, and, sweeping athwart it, knocked me over, and so thoroughly frightened the negroes that with a yell they jumped out and were washed on shore. The boatmen, taking advantage of their being thus lightened, jumped out also, and contrived to push the boat off into deep water. Thereafter we worked our way round to a better anchorage.

Juma had rushed on shore along with the Manyema and Arabs, and he went at once to the Mission House and informed Mr. Hore of my arrival. That gentleman at once came down, bringing with him a lantern, and succeeded in getting a native to pull through the surf to bring me off. With such a sea running I felt rather suspicious about trusting myself in so frail a craft; but eventually I made the venture. On getting near shore, the troubles of my voyage reached their culmination by a huge wave washing over the canoe, swamping it, and rolling me over helplessly on the beach, where Mr. Hore picked me up utterly exhausted.

I was so completely worn out that I staggered along to the Mission House like a drunken person. There, however, I was soon put right, and with a change of clothes and a good cup of tea, accompanied with luxuries I had not tasted for months, all my troubles were forgotten, and we were soon deep in the mutual recital of our adventures.

Before I went to bed that night, in a capacious room in the tembe, I felt that I had found a missionary of the type which Livingstone longed for, and could so seldom find—a man who did not waste his time wandering about with his Bible in his hands, trying to teach the natives to talk mechanically about things they could not comprehend, but who lived the essentials of his religion; whose word was as good as his bond; whose advice was worth having, and could be trusted; who could teach them how to build

better boats, to dig their fields to more advantage, and to be ashamed of committing a bad action.

Where missions have failed, the fact has been generally due, I suspect, to the missionaries themselves. Arriving among brutal and degraded savages, they at once adopt an aggressive attitude; they preach a crusade, and declare that they have come to change all the old customs. The natives naturally become alarmed and suspicious; consequently the missionaries, never gaining their confidence, never get any deep hold upon their affections.

The great aim and endeavour of every missionary, I humbly suggest, should be to show the natives that he has come for their good, by first ministering to their material wants. Having thus won their hearts, he will find it much easier to raise them in their moral ideas, and to lead them ultimately to spiritual convictions; but to commence by inculcating Christian doctrines apart from all efforts for their material advancement, is in my opinion to throw away so much labour and valuable time.

The African native appears to me to be practically a materialist. He has indeed a certain dim idea that there is a Supreme Being, but he cannot grasp the conception, and therefore lays it aside. In the same manner, the notion which he has of immortality as a second existence is a purely material one. The idea of a soul or a spirit, as we conceive it, is utterly beyond his mental calibre. The "phepo" or ghost is there, he says; but it is like the wind, we cannot see it. It

feels pain, hunger, disease, cold, &c, the same as living people, only the ghost is of that peculiar nature that we cannot see or feel it.

To begin, then, by overwhelming the native mind with the exposition of subtle abstract ideas, is simply to confuse him and fill him with fruitless wonderment. To him it is no better than nonsense. He may learn to speak by rote about such things, but cannot hope to comprehend them without a long and careful study from childhood. I confess I have been often led to doubt whether a *grown-up* native could attain to a clear conception of the higher doctrines of Christianity. He might understand sufficient to make him a better man morally, but beyond that I do not believe he could be carried.

The necessity of having men like Mr. Hore cannot be too apparent. Missionaries must be thoroughly practical men, learned with a wide experience of the world, and not merely that of theological colleges; men who are readier with their hands than their tongues; men who adopt the policy of commending their doctrines mainly by the subtle influence of their life, rather than by pursuing openly iconoclastic measures. In a country like Africa, held in as great bondage by custom as the natives of India are by caste, this last is a duty imperative on every one who would hope to do good.

Next day after my arrival at the Mission Station we took a walk through Ujiji. I was very much disappointed with its appearance, my conception of

it, as drawn from various books, having been utterly wrong. But for the appearance of the inhabitants, it might have been supposed to be a deserted village, so ruinous did the houses appear. These represented almost every style of African architecture—the huge-roofed Indian bungalow, the flat-roofed tembe, the quadrangular hut of the Waswahili with baraza in front, and the beehive-shaped hut of most of the natives, with composite forms of every description. Very few of them were massed together. Almost all were situated in the midst of Indian-corn gardens, which helped to increase the appearance of desertion. Hardly one of the Arab houses was in good repair. Either a part of the walls or of the roof had fallen, or they remained unfinished.

The prospect, however, was on the whole not unpleasing, when viewed above the level of the houses, where an interesting variety of trees showed themselves—oil palms with their bunches of yellow plumes, the graceful bark-cloth tree, guavas and papaws, bananas and other palms. I was much interested to find a single cocoanut-tree at this unusual distance from the coast. It was still young, but had borne fruit. Similar cases of the cocoanut growing so far from the sea are almost unknown in Africa. It is rarely found more than thirty miles from the coast. At Unyanyembe also, as we shall see in the sequel, we found several growing, and had even the further satisfaction of getting several nuts.

I was most disappointed with the market. After the glowing descriptions of both Stanley and Cameron as to the wonderful variety of tribes who come with their special produce, I went prepared for a wonderful spectacle of animation, and intending to take advantage of the gathering to increase my knowledge of African tribes and of the varied produce of the lake regions.

Much to my chagrin I found very few people, and these were principally Wajiji and Arab slaves, or porters. There were a few natives of Uvira, and, with much hunting, one or two from Urundi and Uguha were "spotted." It is quite true that natives come to Ujiji from almost every tribe in the neighbourhood of the lake. Their visits, however, are very few and far between, so that there are never representatives of more than two, three, or four tribes present at any one time.

The market is almost entirely for the sale of articles of food, the most prominent being palm oil, millet, rice, Indian corn, sugar-cane, sweet potatoes, ground-nuts, mutton, fish, salt, &c. The entire quantity of ivory exposed was not worth ten dollars. There were no slaves, thanks to Mr. Hore's presence; indeed, there was hardly anything to be seen of any value. Most of the vendors had their stores under small booths. They have made the first advance towards the use of money in the adoption of a bead currency, which performs all the functions of our coppers, cloth being the medium for the larger purchases.

There was an air of stir and business about Ujiji, which contrasted very conspicuously with the appearance of most native villages. Trade had given occasion for the first great step in civilization and advancement, namely, mutual dependence and assistance. A certain differentiation in the social function had taken place, so that each native, instead of supplying all his own requirements by the labour of his own hands, now received his clothing from one man, his salt from another, his fish, palm oil, cooking-pots, &c., from others. From different tribes he received articles not produced in his own country; and finding them necessary for his comfort, he learned the necessity of remaining at peace with such tribes, and encouraging them to come and barter. Hence the appearance of bustle which pervaded the place. The frequent appearance of Arabs in their flowing garments, (sometimes walking, sometimes riding on Muscat donkeys,) bands of Waswahili, strings of slaves laden with grain or ivory, flocks of sheep and goats, and small herds of cattle, together with the canoes on the water, all gave the place an appearance not unlike a coast village on the Mlima.

Curiously, however, the Arabs never seem to leave any impress of their own habits, customs, or religion upon the natives. The Wajiji, except so far as trade has influenced them and widened their conception of things, have remained exactly as the Arabs found them. They still retain the same absurd dress, which is neither ornamental nor useful, hanging as it

does from one shoulder and beneath the opposite arm-pit, where it simply covers one side of the body, and flutters in every breeze. The better classes sometimes dress in the style of the Waswahili, but very rarely. The Wajiji are to the tribes around Lake Tanganyika what the Wanyanwesi are to the countries between the latter and the coast. They are imbued with a trading instinct, but restrict all their operations to such places as they can reach by canoe. They never become porters in caravans, or themselves trade by land.

In the evening, after our walk through the different districts, the greater number of the Arabs came with many salaams to visit me. To strangers arriving at Ujiji they do not now extend the same profuse and generous hospitality with which they received Cameron and Stanley, as they consider that that duty now devolves on our own countryman, Mr. Hore, who certainly fulfils it in a manner which reflects honour on himself and his race.

From Mr. Hore I learned the sad story of the disastrous march, and the fatal conclusion, of the Abbé Debaize's expedition. Got up by the French, presumably through jealousy of the honours of discovery which were falling to other nations, it was heavily subsidized by their Government. All sorts of societies vied with each other in supplying the leader with every conceivable appliance for observations in the various branches of science. He had, indeed, sufficient to stock a station. To have been able to

use a tithe of them, he must have been a perfect encyclopædia of science. And yet, strange to say, the worthy Abbé seems to have been in blissful ignorance of the most rudimentary rules for even geographical observing. But this fact appears to have been thought of small account. The French wanted some one of their countrymen to go across Africa, and to equal, if not excel, the deeds of Livingstone, Cameron, and Stanley.

Thus instructed, but totally oblivious of all the requirements of a traveller, and evidently filled with the strangest ideas of the character of the negro, he started with a huge caravan for Ujiji. Alas! he had reckoned without his host; troubles soon beset him on every hand; his men deserted and plundered him at every step. He got into trouble with the natives, several of whom he treacherously shot, a proceeding which afterwards led to the murder of the missionary Penrose. After leaving Unyanyembe matters became worse and worse. Living on bread soaked in brandy, he appears to have lost his senses. Once or twice he was almost totally deserted, and in order to get on he had to destroy or leave behind great part of his goods. His porters emptied his bales and bags, substituting grass and sand instead. Then they would desert, and return to the coast rich in slaves and ivory.

At last the Abbé reached Ujiji almost mad, with shattered health, and with the expedition a perfect wreck of its former self. There was a French mis-

sionary station here under Père Denaud. To this he naturally proceeded, expecting a pleasant reception from his countrymen after the trials he had passed through. Unfortunately he arrived when they were at prayers or mass, and was politely asked to wait till they had finished. As a good son, or "father," of the church, a little patience in such circumstances might have been expected of him; but, instead, he turned away with very unbecoming language, more suited to an inhabitant of Billingsgate than to an Abbé. This would have been all very well if he had gone no further. But from mad words he proceeded to mad deeds. He began perambulating the pathways of Ujiji, firing off his revolvers in the most dangerous manner, and otherwise disturbing the peace.

The English missionaries hearing this, immediately despatched one of their number to invite him to take up his residence with them. Somewhat calmed by this generous proposal, he accepted the proffered hospitality. To his hosts he became much attached, but towards his own countrymen he maintained an attitude of implacable enmity.

On reaching Ujiji it was the Abbé's intention to proceed by the north end of Tanganyika to Victoria Nyanza. Difficulties, however, came in his way, and receiving a fright at some place, he abandoned his original scheme, and resolved to reach the latter lake by passing through Goma. He proposed to strike from Victoria Nyanza to Nyangwe, and thence to the West Coast.

In pursuance of this scheme, he crossed over to Mtowa. Reaching Ruanda, he got into a quarrel with Kasengè and his people, in which several houses were burned. To put matters right he had to get the assistance of the English missionaries. This settled, he became dreadfully ill and nearly blind. Once more the English were good Samaritans. He was carried to their station, where he began to improve. Then he crossed to Ujiji, where he became worse, and died in the English mission-house.

So ended one of the most disastrous and badly-planned expeditions that ever left the East African coast. With his last words he left everything in the care of Mr. Hore. That gentleman put himself to an incalculable amount of trouble, and as far as I am aware has never received the slightest recognition of his hospitality and kindness.

As the Abbé's goods were intended for the advancement of research, and had to be disposed of at any rate, we considered that it would not be wrong to select such articles as I required, leaving the French Consul and Dr. Kirk to settle what the prices should be. I took goods to the value of about 150 dollars (as we calculated), and sent the inventory to the coast, stating for what use the goods were to be applied. To my immense astonishment, when I returned to the coast I found that the French Consul had held out for the most extravagant prices, so that the amount from 150 dollars rose to about 1000—six times the actual value of the articles at Ujiji.

Our examination of Debaize's stores revealed some strange things. There were twelve boxes of rockets and fireworks, which would require about forty-eight men to carry them, several boxes of dynamite (for what conceivable use no one knows), two large barrels of gunpowder, innumerable revolvers and guns, two coats of armour, several boxes of brandy, two loads of penny pop-guns, a load of small bells, large quantities of botanical paper, insect bottles and tubes smashed, surgical instruments, boxes of medicines without labels, photographic apparatus, every conceivable appliance for geographical research—though he was perfectly ignorant of the working of even the most simple instrument. He brought with him also a hurdy-gurdy, valued at 12,000 francs.

His intended scheme of progression through hostile countries was truly French, and admirable in its absurdity. When he came to a village with the natives ready to oppose his passage, he would try the softening influence of music on the savage breast, by strapping the hurdy-gurdy on a man's back, and with another to turn the handle, march peaceably, as became a priest, against the heathen. If, in spite of this, the savage breast refused to be softened, their blood would then be on their own head! They would find they had to deal with the church militant! With all the calmness of the French nature, he would clothe himself in complete armour, raise confusion in the enemy's ranks by a discharge of rockets, and march deliberately to victory or death.

This plan, which has never yet had a proper trial, is well worthy the consideration of African travellers. Of the hurdy-gurdy we will hear more anon.

The time I spent with Mr. Hore was peculiarly delightful. We were at one in our ideas about Africa and African travelling. His description of the missionary work he was engaged in, of the results that had been secured, and of his hopeful schemes for the future, almost made me vow to join the mission the moment I was free. This interchange of thought did me a great deal of good in many ways, more especially in making me understand myself and my own ideas better than I had ever done before.

On the 7th of January, I had a very violent bilious attack, which is notable in many ways. During the rest of my stay in Africa, I never had the slightest trouble with my liver, nor had I an attack of fever. Yet it was not because my liver was all right during that time. Quite the contrary. It was never so deranged. But the peculiarity was that it had got into some strange condition suited to the climate, and so acted on my system at the same time that it warded or threw off fevers. When I got back to the coast I never felt better in my life, though I had a stomach like an alderman, owing to the swelling of my liver and spleen. The moment I arrived in England, however, I discovered in what a bad state I really was. The bilious attacks returned with great violence, though, fortunately, I had no fever.

The rest of my stay at Ujiji was pleasantly occupied

reading newspapers, writing letters, enjoying delightful conversations and charming walks in the cool evening.

On the 12th of January we prepared to start for Mtowa in the "Old Calabash," or mission boat. After the customary difficulties and delays we got the Wajiji crew together and everything shipped on board. There was a fine breeze in the afternoon, followed by thunder and rain, but we lost the best of the breeze by our delays, so that it was after dark when we finally got under weigh. I wanted the captain to steer straight for Mtowa, the breeze being then favourable; but this he dared not do. So we kept along shore, which sheltered us from the wind, and so delayed our progress.

Towards morning the Wajiji ventured to try the crossing. Everything went well till near the middle of the lake, when signs of a brewing storm were seen, both in the north and south. Having then very little experience of Tanganyika storms, I ordered the men to keep on their course, as they wanted to put back at once. There were few sheltered places along the western side, but in the arrogance of my ignorance I would hear of no return.

I soon regretted my decision. A dreadful stillness fell upon the lake, the wind dropped to a calm, and the temperature from being hot suddenly became cold. A lurid gloom embraced the water, and circumscribed our view, so that nothing was seen but our watery surroundings. From both north and south fearful-looking clouds, with peculiar threatening hues, and

extending in complete arches over the sky from horizon to horizon, gradually advanced, as the ranks of an army push forward to join in a terrific struggle for the mastery.

Deep grumblings presaged the rising wrath of the tempest. Now and then cold gusts of wind went whistling by. The men ceased rowing, and, not knowing what was our best course to pursue, we sat in breathless dread awaiting the issue of the coming battle. I had seen many a frightful tropical storm, and even passed through them; but anything more terrible and awe-inspiring than this I had never beheld.

In a few moments more the black cloud-banks advanced near each other like a great overspreading pall, producing a deep twilight shade. At last the gage of battle was thrown down. A brilliant flash of lightning darted forth, followed by a reverberating roar, as if the very heavens had split open. The clouds closed apparently right overhead, and so near that the top of the mast seemed to touch them. Then flash followed upon flash, accompanied by such deafening thunder that we sat cowed and terrified, every moment expecting to be struck and annihilated. The rain from falling in drops soon turned into drenching torrents. We could not see a hundred yards in any direction.

A new peril now menaced us. The wind came on with hurricane fury, and from the surrounding gloom I saw just in time the advancing crests of the

waves. I yelled to the men to take to their oars, and keep the boat's head to the storm. They, blanched with fear, sat quite stupefied, unable to move a muscle. If that wave struck us as we lay we might say our last prayers, for certainly our old lop-sided canoe would go over in a twinkling! Prompt action was necessary. So in the resolution to do my best to weather the storm before giving up in despair, I stopped my yelling, seized a pole, and brought it with a stunning blow over one of the men's backs. I repeated the process on a second, and it hardly required a third application to put new life into them. Down came the waves, but we were ready for them, and though nearly capsized we got through the first shock successfully.

The scene that now commenced was perfectly indescribable—the dazzling lightning, in unbroken flashes, blazing through the darkness—the reverberating peals close above us—the great black cloud-banks broken into jagged, whirling masses—the drenching rain—the storm of wind, and the angry waves breaking over us with fury, requiring constant baling! The men at the oars and the one at the helm were only kept at their posts by fear of my pole. The storm, however, still increased, and a fresh danger appeared. A peculiarly hazardous chopping sea arose, so that we were never certain how the waves would strike us. I was almost useless at the helm from inexperience, so that I dared not take it myself. But the captain was fortunately not a bad steersman, so I stood by him in his trembling bewilder-

ment and kept watch for the waves, and pointed them out.

For about an hour this dreadful squall continued; then gradually it began to pass away, and we breathed freely once more. I now got time to look at my compass, and found that we were drifting fast away to the north. Putting forth all our energies, we made a grand struggle for the shore on the eastern side, as being better known and having better shelter. At last we reached the mouth of a small stream with a sheltered nook, where we went on shore to dry our clothes and recruit exhausted nature.

We were soon joined by another boat, crossing from Mtowa to Ujiji. Fortunately it had a capital crew and was just properly laden, so it continued to weather the storm. Not so another boat, which went down with a large consignment of ivory and slaves, about eighty in all, only one of whom was picked up alive.

After this day's experience of a Tanganyika storm I interfered no more in the affairs of the boat, and left the men to choose their own time and opportunity for crossing.

The night following the storm we steered into a small creek, and, finding no better place in the darkness for camping, we lay down in wet clothes on the shingly beach. We were awakened in a rather unpleasant manner about midnight by a strange crashing and trampling sound from the surrounding forest. For a moment I listened, not understanding what

was coming, when all at once a dark line of buffaloes came dashing down, evidently making for the water. With a warning yell, just as they were nearly on us, I jumped up. The movement saved me from being trampled to death, as the startled animals swerved to right and left, and swept past, leaving me unhurt.

For three days we continued along the eastern shore, now and then advancing a little out to see if the weather was promising for a crossing, but retreating in haste if the slightest unfavourable sign appeared. On the 17th of January we at last succeeded in our endeavours, and reached Mtowa safely, where I found, to my chagrin, that during my absence a portion of my cloth had been stolen by some person or persons unknown, but believed to be some of the Abbé Debaize's porters.

The following day being Sunday, we remained with Messrs. Griffith and Hutley, who continued to do everything in their power to assist me, and who impressed me with the conviction that they were unostentatiously performing the real functions of an international association for the opening up of Africa and for the assistance of travellers. They found me broken down in health and spirits, and in want of stores. They sent me off buoyant and joyous, with every want satisfied, and more eager than ever in the work of exploration. All honour to these good men, who, with none of the world's rewards and honours showered on them, devote their lives to a great and enlightened object full of hardships and dangers,

seeking no satisfaction but the approbation of their own conscience.

On the 19th of January, 1880, I set out on my return to my camp at Iendwe. I determined, however, to take a new route, namely to pass down the Lukuga to its confluence with the Congo, thence up the Lualaba, or Lugarawa as it is here called, to Lake Moero, and then east through Nsama's country to Iendwe.

It was with very buoyant spirits I started for the mouth of the Lukuga, in the expectation of a successful issue to this new scheme of exploration. I was filled with all the confidence of a young lion which had never known a reverse or been thwarted in one of his projects.

After a very hard march I reached the mouth of the Lukuga, to find a marked difference in the appearance of the channel. The volume of water issuing had diminished very considerably, and a bar of sand, which I had not previously seen, was now distinctly visible by the breaking of the waves over it.

I was much interested to find a large Warua army camped here, accompanied by women and children, on the way, as they said, to fight the Wagoma, in conjunction with the Waguha under Kasengè. They seemed to be proceeding very leisurely, and living on the produce of the Waguha fields.

In a letter from Mtowa, dated many months after, I learnt that this large army had got no further than Mtowa or Ruanda, and did not seem to be hurrying;

finding it perhaps more profitable to live at the expense of their friends the Waguha. Troubles, however, between the two were likely to arise, as the Warua could not expect to be allowed to remain much longer in the country on such terms, so that in the end it might come to be a fight for the mastery.

The Warua received us very civilly, and allowed us to pass unmolested through their camp.

The men, notwithstanding their long rest at Mtowa, were thoroughly done up when we reached Manda; and I was myself very much troubled by sore feet and rheumatic pains in my leg joints, which made walking an operation of agony. During the evening, and long into the night, I observed the men in deep consultation, ever and anon casting furtive glances towards me. Fearing some mischief, I went to bed.

In the morning, on looking out I saw no signs of any one moving. I gave a shout to rouse them up. Makatubu and Litali the cook turned out yawning. One or two of the others sat up, but the most of them did not stir. I perceived at once that there was a battle in store for me. If I did not win, then adieu to all attempts at exploring the Lukuga! as the men, thinking that I was simply taking them to Manyema, where they would all be eaten up, had resolved to throw every obstacle in my way.

Seeing the position of affairs I unbuckled my belt, and without a word of warning I let fall such a whack on the bare skin of one of the sleepers as

made him jump up with a yell. Fairly at it, I felt like a slaver, and sprang from one to another, dealing right and left without the slightest compunction. In a few moments every hut was cleared. I spoke not a word. I was in too great a rage for that. Pointing to each man's load in turn, I compelled him to pick it up. The slightest hesitation, and down came the belt without further parley. No man dared consult with his neighbour, and before they well had recovered their wits, they were marching out of the village, carrying one of their comrades, who was too ill to walk.

Makatubu had the same fears as the men, and was of no use. Indeed, as a leader he was always perfectly helpless, having not the slightest influence or authority among the porters, who usually laughed at his orders, and refused to recognize him as their commander. Chuma they knew, and me they knew; but who was Makatubu that they should obey him? Such was their mode of putting the matter. My argument that he was simply my mouthpiece, had no weight with them. In this nasty situation I began to appreciate Chuma's value more justly; for now, when the entire work fell upon me of forcing the men to do this or that, I felt half the pleasure of travelling gone.

Crossing over a ridge on which the principal village of Manda is situated, we struck the Lukuga again, at the point where it narrows and rushes through the gap with such violence. Along the banks we then

tramped, through matted grass and creepers, on a path scarcely traceable. Getting in front, I crossed a noxious swamp with huge spear-grass, and then halted to await the arrival of my men.

Half an hour passed, and they did not appear; I was alone, and thinking that they had missed the way, I began to shout; but there was no answer. The suspicion then flashed upon me that they had deserted me. Overwhelmed at the thought of having all my grand schemes thus shattered, I sat down and nearly cried. I could not rise to go and find out the truth for myself; so there I sat for an hour, wondering what I should do next. At last, however, my fears were removed by the guide appearing, with the news that the men had gone off the right path and were camped at a small village. I was so pleased to find that they had not deserted me, that when I met them I said not a word about their wilfully taking the wrong road, though it was plainly a part of their obstructive policy. They tried to raise trouble about the beads given out to them to buy food, but seeing me put on my new character of imperialism they quieted down. I had treated them too well before, but now on attempting to take advantage of my kindness, and to thwart my intentions, they found they had "caught a Tartar," who could put on wrathful looks as well as smiles. Feeling that they were just on the look out for an opportunity to compel me to turn back, I became excessively irritable and suspicious,

and I believe I was ever too ready to blaze forth in passionate rage.

Next morning my men, afraid of a repetition of the previous day's thrashing, were up on the first peep of dawn, and we were off before the sun got above the horizon.

We now entered a charming narrow valley, through which the Lukuga wound its way. On our right the Kifinga Hills ran parallel to our route, while on our left were those of Kichanja. On each side the hills rose with fine curved slopes, well wooded to the very top, while buffaloes and antelopes roamed in considerable herds along the banks of the river.

We camped early at a small village called Mkilewesi, near the Lukuga, which has here a very rapid current, on which no boat or canoe could venture with safety. The geological formation of the hills and valleys is that of soft sandstones and shales, with coarser strata containing water-worn pebbles of various sizes.

On the third day's march we camped beside the Kaca, at a small village a few miles from Miketo. We now began to find that the Lukuga instead of trending away S.W. to the Congo was really keeping N.N.W., a discovery which was not at all pleasant, as that would lengthen our route very much.

After leaving the Kaca the hills become less in altitude, but the valley still more charming and picturesque. At several points huge quadrangular

masses of sandstone rose abruptly from the centre of the valley like great cyclopean monuments. One of these, with the Lukuga flowing past its base, and surrounded by grassy glades, while wooded itself on the top, presented a picturesque scene of no ordinary beauty.

The men still continued their dogged policy of obstruction, and on the fifth day of our march from Manda, they tried once more to frighten me into stopping. I was, as usual, considerably in front with my servant, when a porter arrived with the news that all the men had stopped at a village two miles back, declaring they would not go any further that day (though they had only marched three hours). I sent word back that they must get what food they required and then come on to where I was, as I would not go back to them. This they refused to do, and as I was determined to remain I made myself as comfortable as possible without tent or cooking utensils. Having no beads or cloth, I had to beg some Indian corn and sweet potatoes from the natives, which we cooked over the coals. Next morning the porters arrived, looking very shamefaced and sullen, but I said nothing to them. Having paid the natives for what we had got on credit from them, we resumed our march, and after two hours we reached Makalumbi, the last Waguha village to the west.

Makalumbi was the largest native village we had seen. It is situated on a ridge which extends across

the valley of the Lukuga, and commands a magnificent view, both to the east and west. The houses are very large, with the customary peculiar form, half pyramidal, and half dome-shaped. No walls are visible, except about the little porch at the door, which is very low. They present the aspect of so many ricks of straw in a farmyard, as nothing but thatch is seen. They are always detached from each other, and built in regular lines and at equal distances, the spaces being generally grown up with weeds and grass. In looking down the principal pathways leading out of the village no doorways are to be seen, as these are always away from the road, and look into the back of the neighbouring house. The arrangement may be intended as some shelter from wind, rain, and sun, or it may be for the sake of privacy.

In the centre of Makalumbi stands the tallest native house I have seen in Africa.

The people here are mixed Warua and Waguha, the latter preponderating, though the chief Kalumbi is an Mrua. The people are remarkable in many respects, and are infinitely superior to almost all other East Central African tribes in matter of taste, intelligence, cleanliness, morality, and government. Yet they have jealously kept themselves free from all contact with Arabs.

They have as a rule well-made figures, the unmarried girls being frequently perfect models of shape and form. Their skins are smooth and clean, and

testify to plenty of good lubricators and comfortable living. The frightful specimens of withered humanity so frequently found in most tribes are here rarely seen; and the married women have seldom the monstrously long breasts which usually characterize the negro.

The men, however, have frequently a somewhat unpleasant cast of visage, which suggests the idea of a good deal of latent cunning and villany. Their skulls are of a much better type than the average negro, being considerably broader. The hair of their head is worn very long, and dressed into the strangest and most fantastic styles. The most fashionable form is that of four plaits, doubled up and crossing each other over the crown.

During my stay in Makalumbi I had an opportunity of seeing the operation of hair-dressing, which being very elaborate and tedious has to be done by a second person. The dresser commenced by combing out the hair smooth. It is then divided into four equal parts—one at each ear, the third over the forehead, and the fourth at the nape of the neck. Each of these is temporarily tied into a knot. The person operated upon is meanwhile lying on his front or his side to vary the position. The dresser is provided with red powder soaked in water, and as much false hair as possible, together with plenty of the oil expressed from the nuts of a tree called the mpafu. Everything ready, each division of the hair is taken in

turn. The dresser makes up a filthy ball of the red powder mixed with hair and oil. He inserts this close to the skin, and works the hair carefully over it, until it assumes the appearance of a bulb; the hair is then carefully plaited, using plenty of powder and oil, and introducing the false hair to lengthen out the plait as much as possible. The other divisions are similarly treated, and finally they are carefully crossed over the crown of the head, fastened down with about a dozen enormous iron pins or bodkins with shovel-shaped or circular heads, and six to eight inches in length, giving the wearer a very formidable appearance, before which even the proverbial "quills upon the fretful porcupine" sink into insignificance. This completed the finishing touches are put on with great care, not a single hair being allowed to be out of its proper place.

The operation in the case I saw occupied two entire days. They have to be very careful not to let the hair be disturbed, and they sleep on unpleasant neck-rests to avoid such a misfortune. It may seem very strange that in a savage country so much attention should be given to the dressing of their hair, and it shows that the iron rod of fashion rules in the heart of Africa as firmly as in the select circles of Paris or London; only they have not the same variety of articles with which to enhance their charms, and hence are not so changeable.

While speaking on this subject, we may complete

our description of a native swell. As in our own country, the fashionable hours among the Waguha are those of the afternoon. In the forenoon, the Mguha appears badly dressed, his face disfigured in a ghastly manner with the previous day's paint, and with lying among the ashes during the night. In the afternoon all this is changed. He oils himself till he shines again — this in place of washing. He dons his best clothes, his circlet of cowrie shells round his forehead, and necklace of large, sungo-mazi beads like pigeons' eggs. His wrists are covered with brass rings, and his ankles tinkle with the same. His forehead is resplendent in stripes and spots of new paint, in vermillion, yellow, and black; and now, with a spear in his hand, his equipment is complete.

The men wear their own home-made cloth, woven from the fibres of the Mwalè palm-leaves. The dress consists simply of a piece of the cloth, from two to four yards long, and two feet broad. This is worn in the style of a Highland kilt round the loins. When an Mguha sits down, he crosses his legs like a Turk, and does not double them up with his knees to his nose, as is almost invariably the case with all other tribes. When thus seated his limbs are not seen, and his long body looks very ludicrous, rising apparently from a heap of greasy cloth. The women merely wear an apron in front.

The tattooing is another part of their get up worth mentioning. In most tribes there is either very little,

or it is badly done. Not so with the Waguha, more especially the women. Among them tattooing is elevated to the position of an art, and made a pleasant form of adornment, and almost a substitute for dress. The abdomen is the part chosen for the operation. From the umbilicus as a centre the whole of the belly is covered in the most artistic and symmetrical manner with raised spots and lines in relief, which has a most pleasing effect, and, as I have already said, forms a substitute for dress, taking away the appearance of nudity. At the same time the operation diminishes the sensibility of the skin, and so helps in another way to obviate the necessity for clothes.

In the afternoon after my arrival I went off to visit Kalumbi, the chief, taking with me a present. On the way I was met by the under-chief, who informed me that he was commissioned to hear anything I had to say, and to receive the present. To this I politely replied that I was accustomed to speak only with chiefs, and that I should keep the present till his superior saw fit to receive it himself. This had the desired effect, and in a few minutes we were conducted into the great man's presence. The house in which we found him was large, and lighted only by the low doorway, which, being crowded by eager spectators, admitted very little light. The appearance of the interior was weird and mystical in the extreme. At first nothing could be seen but a smouldering fire in the centre of the room. From the deep darkness a

voice uttered something, and then a pause would occur; occasionally a flicker of the fire revealed an oily face for a second. On getting accustomed to the darkness, I at last was able to distinguish a store of firewood on one side, then a pile of pombe pots, and in one corner several carved wooden gods. I next dimly discerned two councillors, and finally Kalumbi himself, whose appearance rather prepossessed me. The sombre light which prevailed, the flickering fire, the smoky shining roof, and the low-toiced conversation, combined to make one think of dark conspiracies, foul deeds, and Satanic mysteries.

Kalumbi expressed his pleasure at seeing a white man, and wished some would come and live with him. He represented that there were great difficulties in going down the Lukuga, and that the Congo was still a month's journey off.

Next day my men came in a body, headed by Makatubu, and declared that they were determined not to go any further—that I was just forcing them along like donkeys to the Manyema, who would murder and eat them. In this determination they were firm, and neither threats nor promises could move them from the position they had taken up. After much quarrelling and arguing, finding that they were united, I saw it was of no use fighting a losing battle, as with such a party my cherished scheme could never be completed. I, however, obstinately refused to return to the mouth of the Lukuga, and so we at last compromised the matter

by agreeing to strike away S.W. through Urua to the Congo, and thence by Kabuirè to Iendwe.

We had been promised a guide by Kalumbi; so we turned out on the 27th of January to resume our march, when the chief arrived and coolly informed us that we could not have a guide, as we had only stayed one day with him, and his people had not had time to see me. Besides, he (the chief) was a great chief, and was I going to cut him off with one day when I had remained so long with Kasengè? I might go if I pleased, but it would be without a guide. I tried to bribe him with more cloth, but he disdainfully replied he did not want my cloth, as he burnt all that I gave him.

The men, who were still unwilling to go forward, took advantage of this, and tried to make me believe that Kalumbi meant war, and that they had seen bodies of men crossing the Lukuga for the purpose of stopping our passage; but I would not listen to them, and only got into a rage.

Next morning no guide appeared, and I therefore prepared to start without one. The men refused to go. But I was now roused to such a state of excitement that I vowed I would compel them to march though I had to shoot one of them as an example. I therefore ordered the men out, and told them to pick up their loads. No one stirred. I unbuckled my belt, and walking up to one I pointed to his load. Nobody spoke, and he did not move. With all the strength in me I brought the belt down upon his

bare back. This made him wince, but it required another of the same before he obeyed me. I did not require to repeat the cure with the others. They shouldered their burdens, and in a sullen procession moved off towards the river.

Seeing now that we were determined to proceed, guide or no guide, Kalumbi changed his mind and gave us one. Indeed, he himself conducted us to the river. On the way another of the men mutinied, and had also to be brought to his senses; each fight for the mastery causing the crowds of natives to fly as if for their lives.

On arriving at the banks of the Lukuga we found no canoes, and the current was so swift and broad that the prospect of getting across in the "Agnes" was rather discouraging. An attempt was made, to see how it would do, but the results were very unsatisfactory. The chief, after showing us our weakness told us that there were canoes further up, which would soon take us across. To these we at once set off. At last, after much trouble and talk we came to an arrangement, and commenced despatching the men and goods across.

My difficulties, however, were not yet past. The men saw that if once they were across the Lukuga they would have no chance of getting back. One of them now came up with a grievance, and declared he was going to carry the boat no longer. I said he must carry it his allotted time. In reply, he declared he would go back himself to Mtowa, whether I

allowed it or not. I significantly bade him try to do so. Off he started. I ordered Makatubu to seize him. The command was unheeded by him, and by the others, who sympathized only too strongly with the deserter. It would never have done to let him go before my eyes; so with a sudden bound I reached him. Before he knew what was up, I seized him by his leather waist-belt and dashed him round into the water, where I grasped his gun. Uledi, my gun-bearer, his half-brother, had watched this act with great excitement, and at last, unable to control himself, he advanced to assist the rebel, while the men still stood sullenly by, and never offered to put out a hand. As he tried to push me aside I tore my own gun out of his hands, and felled him with it to the ground; and then, aiming at the other, threatened to shoot him if he moved from his place.

In this position I waited till the boat came back, and then ordered Uledi and his half-brother to enter it. The former refused; but the other men, who had watched the scene in a great fright, were now completely conquered, and on commanding them, with a menacing aspect, to put the mats and belongings of the mutineers into the boat, they at once did so. At this Uledi got into a terrible fury, assuming the most dramatic attitudes and gestures, and screaming with rage, his eyes almost starting from their sockets. If he had had a knife at the time, he would certainly have stabbed the man who took hold of his mat.

Not having that deadly instrument, he seized hold of the man, and a terrible tussle ensued, which roused the blood of the porter and made him do the work in earnest. Another man also came to his assistance; so Uledi was finally subdued, and bundled into the boat. Again I had won the victory, but such another struggle I hope never to have to face.

I was all the more annoyed at this incident, as Uledi had always shown himself much attached to me, and had stuck faithfully by me when others had failed. It was, however, a battle to determine whether I or the porters were to direct the movements of the caravan.

The canoe men having now got one half the porters on one side, and the other half on the opposite side, had us quite in their power, and they demanded payment before any more were taken across. I sent Makatubu over to satisfy them, but when there they wanted double the amount agreed upon; so I had to go over myself next. To prevent those left behind deserting, I took all their traps and guns. After paying the boatmen what they demanded, I promised them an extra allowance as soon as they had transported the remainder of the party. When they brought these over they were so suspicious of us, that they kept the boat off-shore till I had thrown to them what I had promised to give.

It was now past one p.m., and dreadfully hot. After a march of two hours down the river we reached the village of Akilonda. We had left Uguha behind

us, and entered the country of Urua. With the broad waters of the Lukuga flowing between us and Mtowa, I knew I was master of the situation, and could sleep in peace, without the dread of finding myself companionless in the morning.

CHAPTER III.

AMONG THE WARUA.

THE village of Akilonda is snugly situated in a considerable forest near the Lukuga, and on the slopes of the low hills on the southern bank. The river can be seen from these hills winding away W.N.W. through a gradually shallowing and winding valley, till it seems to continue its course through a great plain. The tribes on the northern bank are represented as being very dangerous, not allowing any one to pass; on the south side they are less difficult to deal with. The Lukuga is described as moving with a much slower current, without cataracts, after passing Akilonda, besides widening out, and even forming lake-like expansions. From the accounts given of the length of the journey down the river, it would seem that it runs into the great bend of the Congo, south of Nyangwe.

The chief of the village was from home when we arrived, but was hourly expected On the following morning he had not yet appeared, and in consequence we had some difficulty in getting a guide. By dint

of much persuasion and bribing we at last succeeded in securing a villager to show us the way, or rather, to conduct us through the forest, in which no distinct path was traceable.

Ascending the forest-clad slopes of the bordering hills we reached the top in about two hours, and obtained a most extensive view of what appeared to be simply a great unbroken wooded plain, extending away south and west to the far horizon. From the hills a gentle descent led us down among tall dew-laden grass, through which we had to make a path for ourselves, precipitating its watery burden in cold drenching showers, and having to march with our arms held in front of our faces to ward off the recoiling stalks.

At midday, after several hours of this not very exhilarating walking, and when the sun had just begun to steam us dry, we reached a large stream called the Nyemba. We found it twenty yards broad, and breast deep, with a swift current, and bordered by a disagreeable expanse of spear-grass growing in wretched fœtid mud. Across this river we had to plunge. I found myself unable to breast the current, and would have been carried off my feet but for the ready assistance of two of my men, who seized hold of me, and dragged me through. The powers of the men in keeping a footing under such circumstances has always been a subject of wonder to me. They almost seem to have some faculty for fixing their feet in the ground at each step. The

Nyemba flows into the Lukuga, its waters being supplied from the southern slopes of the bordering hills of the Lukuga Valley, and from the Uguha hills near Tanganyika.

We camped in the forest beside the river. In the afternoon we were surprised by the appearance of the chief of Akilonda, who had followed us up on hearing that we had left his village.

The country we marched through on the following day reminded us very much of the low grounds bordering the coast, in its rich forests, tall grasses, and general luxuriance. A marked change in the temperature was also felt as we descended into the plain-like basin of the Lualaba, or Lugarawa, as it is generally known by the Arabs and Warua. This change is doubtless owing to the high mountain barrier, which extends north and south along the west side of the Tanganyika, and either stops or deflects the cold east winds which regularly blow across the plateau, and keeps the temperature very much lower than it would otherwise be. Sheltered from these winds, the great valley of the Congo, with its numerous streams and rivers, and its sluggish drainage, lies festering and steaming in a temperature seldom much below 100°.

About ten a.m. we reached a village named Mtemba, where the guide tried to persuade us to stop; but I refused to be beguiled, and on his declining to proceed, I at once took the lead myself, and pushing on at haphazard, passed other two

villages, crossed a deep stream, and camped at a large village called Kibinga.

We here met an Mgwana, whom I engaged to conduct us to the Lualaba. His services I expected to be of much value, as he was thoroughly acquainted with the language of the Warua, which none of my men knew except in the most imperfect manner, so that I was never sure that anything which was said received a proper interpretation.

Pleased with the acquisition of this new guide, we pressed onwards; but much to my surprise and disgust, in less than an hour he gave us the slip among some cassava bushes, and we saw no more of him. The reason we learned to be the want of the chief's permission, without which he dared not go anywhere, and he had only joined us in the hope of getting cloth in advance. Fortunately we had resisted all his demands.

Again I showed that we could be independent of guides, as I once more took the lead myself, and pushed ahead, determined not to be beaten. In three hours we reached the large village of an important chief called Kasenga. He was out at his shamba or plantation when we arrived. Though we sent messengers to let him know of our visit, he did not deign to appear till the afternoon. I then found him seated on a mat, with his legs crossed, accompanied by Kilonda, two wives, and two principal men. I took my seat on my camp-stool in front of him, supported by some of my headmen, while all around

stood an eager crowd of spectators, forming altogether an interesting and picturesque gathering. The chief was by no means a pleasant-looking personage. He had a projecting lower jaw and dark lowering brows overshadowing sharp vicious-looking eyes. He was dressed in the simple palm-fibre cloth, with his hair done up in the fashionable four plaits.

I commenced business by stating who we were, whence we had come, and whither we were going, and concluded by requesting a guide. When I had finished I was rather taken aback by my friend Kilonda opening fire upon me, and in an elaborate speech laying bare all my shortcomings. "I had come to his village while he was from home, and without waiting for his return I had taken away one of his men without his leave. I then arrived at Kibinga, and without satisfying the chief with a present, or asking permission to engage the Mgwana as a guide, I had summarily started off with him, not even telling Kibinga, the chief, that I was about to depart. What else could I expect but that he should run away on the first opportunity? The Warua were not accustomed to these ways; they were not to be hurried in finding guides; they preferred to do things quietly and according to custom. They expected travellers when they came to a village to pitch their tents, take refreshment, and rest awhile; then go and speak to the chief, and see and be seen by the people. This was what they were accustomed to. They did not understand my haste in giving their people no

time to see of what colour I was; in taking away guides without the chief's consent; and in otherwise outraging the customs of the country. Their people were not slaves, and might go as guides if they pleased, but in such cases we were not to be surprised if we found ourselves deserted in the jungle." The speech concluded by informing me that Kasenga was not satisfied with the present, and that on no account could I be permitted to depart on the morrow. And so the meeting broke up, in spite of my arguments and protestations.

Kilonda's harangue surprised me very much. It was so well put together, and indicated so much latent strength. The appeal to their customs was put very strongly; and for the first time in my travels I felt I had got among a powerful tribe, who would require to be treated with the utmost care and circumspection if we would avoid getting into trouble.

Kasenga himself, however, was a great coward. In the evening, while showing him some of my things, he ran away when I took hold of my gun to exhibit it to him. The inside of my watch also frightened him. Guns appear to be almost totally unknown to the Warua, though they have heard exaggerated stories regarding them. I have never seen either an Mguha, an Mrua, or an Mjiji carrying one of these weapons, though two of the tribes have been in constant intercourse with the Arabs. At Makasenga, for the first time in my march, a few articles were stolen from me.

The kettle also, was nearly carried off, but the thief having been seen in time, dropped it.

After a day's enforced halt we were up and ready for the road again on the 2nd of February, a guide having been promised. For some time we awaited the appearance of this important functionary. Getting tired I sent a messenger to find him, when we learned that he had not got his breakfast. Half an hour passed, and still he had not eaten, and did not appear to be in a hurry. I stamped about with impatience. Another half-hour, and the guide was persuaded to go and take his food. I waited another hour, then went and hunted him up, when to my disgust I found him comfortably housed and food only cooking. I urged him to make haste, but the chief and he only laughed at my vehemence. Before his food was ready, rain came on, and then he was not going to move till it stopped. On my becoming more pressing he gave me back the cloth advanced, and declared he would not go.

The forenoon was now far advanced, and the rain began to pass off. A new guide was procured, with whom a new arrangement had to be entered into. This satisfactorily settled, his food also had to be got ready. Then his pots and other articles had to get tied up, a task which he performed in the most leisurely way, as if he wanted to kill time. When the process was finished he had to receive his instructions from Kasenga—for he was not to be so much a guide as an ambassador to the next chief. When the chief, who

was evidently intensely amused at our raging impatience, had had his say, our guide next repaired, like a dutiful young man, to his father, and at ten a.m. we actually made a start. We had not tramped many yards when the guide remembered something he had forgotten, and stopped while one of his wives went to bring it. Again we moved forward, and had reached the outskirts of the town when a new thought struck him. He had actually forgotten to bring the food he intended carrying with him. Another stoppage, while this was being put right; and then we proceeded a few hundred yards. We began to think that now our maddening tortures were over; but alas! a fresh idea struck this most forgetful of characters, and he began shouting. On inquiring the cause we were informed that he could not go without a companion. In answer to his shouts his wife appeared, and he seemed to tell her whom to bring as a companion. In despair I sat down, and felt inclined to dash my head against the ground, or to let off my feelings by throttling our tormentor. On looking up after a few minutes, behold, he was himself gone.

Unable to endure this any longer I wanted to go on by ourselves, but the men would not hear of it; so back to the town I hied to look for the deserter, leaving the men where they were. I found him marching leisurely up and down, and showing no signs of returning. He along with others was evidently thoroughly enjoying our discomfiture. At last he pointedly declared he would not go that day.

I had to submit, for I felt so utterly alone. The men were still mutinous and grumbling, and not one of them would assist me in the slightest. The only consolation I got was from Kasenga, who informed me that this was nothing to what I would experience further on. But I had started, and as long as there was a chance of getting through I was determined to persevere, though my mind was full of misgivings as to the result, and I almost regretted I had not listened to the men, whose knowledge or instincts told them that the way would be dangerous.

The carved idols, sticks, and bow-stands to be seen at Makasenga showed a considerable amount of artistic taste. Poisoned spears were commonly carried; and their iron daggers were the most difficult pieces of workmanship I have seen anywhere in Africa.

Much to our delight we actually got off on the 3rd, after waiting on our guide only half an hour. We marched till after midday through a very rich plain, covered with tall grass, and only dotted with wood, except along the banks of the numerous streams and rivulets, where the vegetation is of the rankest character, with trees from which creepers hang in rich profusion. Among the trees the mpafu, with its oily nuts was prominent, and for the first time in our march rattan canes were observed, strips being used as bow strings.

Half way the guide struck for an increase in his pay; but I refused, and marched on without him. He, however, soon rejoined us. We camped at Makaunga,

a collection of villages situated in a finely-cultivated district. As we entered we met a native carrying a large calabash of live caterpillars, on which juicy material he intended to dine. During this march we crossed quite a dozen streams.

In the evening we visited Kaunga the chief (the prefix Ma simply indicates town of), and we anticipated no trouble from an old and decrepit man who seemed almost blind. But we were soon undeceived, and we found we had a very sharp old gentleman to deal with. Our guide, in the manner of Kilonda commenced an elaborate speech, and told Kaunga all that he knew about us. We were then informed that we must stay the next day, at which announcement our guide laughed, well knowing what effect it would have on us.

Next morning I made a vigorous attempt to persuade the men to go on without a guide, but utterly failed. Our position here was rather alarming. The villagers crowded round us with rude clamours, breaking down barriers, and seemingly looking upon us simply as subjects for sport. A very strict watch had to be kept on everything, and the porters dared not move about except in companies. Our only safeguard was the fact that we were proceeding to the head chief of Urua, and till his mind was known they dared not venture to extremities.

I now found, very much to my consternation, that the men had not above two rounds of cartridges, having frivolously used up the small store we had

thought sufficient to take us to the Lukuga and back. This fact had to be kept secret from the natives, as, if it had become known, our lives would not have been worth an hour's purchase. Fortunately I had a pretty good supply for my express rifle, and I was always careful when I arrived at a village to show my shooting powers on a distant tree, an action which never failed to produce a decided impression on the natives; and as they thought that all the men could shoot like myself, they were afraid to commence any bloodshed.

On the 5th we once more got *en route*, with a new guide, who proved to be much more pleasant than the one from Makasenga. We camped at Makihuyu, where another attempt was made to detain us; but we treated the chief with contempt, as we found that our guide would go on with us. We here, for the first time, saw semi-domesticated black pigs. Here, also—strange fact—we saw for the first time a slave-woman in a slave-stick—that is a pole, five feet long, forked at the end, into which the neck is fitted, the prongs of the fork being then attached to each other by a cross-bar. About Makihuyu there are some curious isolated sandstone hills.

We were much amused at our guide, who before entering Makihuyu called a halt, that he might make himself presentable. Taking off an old ragged palm-fibre cloth of scanty dimensions, he carefully rubbed himself all over with mpafu oil, till he shone

resplendent, his servant assisting him in the operation. He then put on a fine and most voluminous dress in place of the other; together with a splendid monkey skin. A few polishing touches were given to his hair, and then he marched on in front in all the greasy glory of an Mrua swell. This sensitiveness about their personal appearance is a most characteristic trait of the Warua.

On leaving Makihuyu we had another instance of the importance of an Mrua guide. Wanting to start as usual with the dawn, we were informed that we might go on if we liked; but he was not accustomed to making himself miserable pushing through the cold dew-laden grass, and he would follow up behind, when we had knocked off the dew and the sun was warmer. Experience had taught me that expostulation was of no use; so I determined to let him have his way.

Up till this time I had always walked in front and borne the brunt of the dew; but I bethought me that it was too hard for the master to have the worst of it, while he had so many naked men to whom a wetting meant only temporary discomfort. So I rather hung back, and looked as if I expected the porters to go ahead and let me come behind. They saw at once what I was aiming at, and burst out laughing, which made me so indignant that off I marched, and kept the front ever after, though the experience was most wretchedly uncomfortable, as the dew felt very cold, and drenched me each day to the skin. In

this state I remained for about four hours; then the sun would take some effect upon the wet grass, and in another hour I would be comparatively dry, though at this season of the year the day's march usually ended in the midst of heavy rain, or at a swollen stream which had to be waded.

All these three annoyances marked our progress on the 6th of February. Our march commenced with tall dewy grass, was continued in a storm of thunder and rain, and ended by fording neck-deep a large stream called the Luisi, twenty yards broad. Thereafter we camped at the village of Kwakisa.

On taking my usual present to the chief, I was encouraged by his appearance and reception to think that we would have no trouble here; but, alas! I soon discovered that he was as sharply cunning as any Mrua we had yet met.

After we had left he began to make what is known in Africa as "trouble," and informed Makatubu that we could not proceed to Makiyombo next day, as he did not know who we were. Why did we ask so many questions about Kisabi (a chief adjoining the Warua) and about other people who were their enemies? Perhaps we were going there to join them in making war on the Warua! For this heinous crime we must stay till he had concluded what to think about us, and in the meantime pay ten cloths as a fine.

Next day, after we had compromised the fine, we were annoyed by a hint that Kisa had two sons, who

would receive a present from us with much pleasure. However, we lent a deaf ear to this new means of extortion.

On the 8th, the chief informed us in the morning that, as he had some business to do he could not go with us till noon. Not relishing the stoppage, I resolved to go on without him. We at once commenced operations with that intention. The tent was taken down, and everything packed up, and we were about to start, when suddenly the war-drums were beat with a vengeance. The women fled out of the village. From every house, and from the fields the villagers began to flock in, in great excitement, yelling and shouting. Soon they were in hundreds round us, and our position became critical. Our men were in mortal terror. But they saw there was no mode of escape for them, and no hope of safety, except through me, and so they gathered together in a firm-looking band, though inwardly quaking with fear.

The slightest accident at this moment would have caused our total annihilation, as only their fear of commencing the attack kept them from swooping down upon us. With our empty guns, and an enemy in our rear, what could we have done, outnumbered as we were ten to one? Our only hope of safety lay in a firm, yet pacific attitude. To have shown that we were afraid, would have been to invite an onslaught. So I ordered the men to make no hostile demonstration, but to be cool and ready. Between the yelling savages and my little band of thirty, I

walked up and down without a gun, smiling upon the antics of the former, as they danced about, with hideous war-cries, challenging us to fight, aiming their arrows or poising their spears as if about to throw them. They were evidently either afraid of our guns, or uncertain what to do, as they continued this demonstration for about an hour.

At last I saw the chief, and getting hold of him I indignantly asked what he meant by this conduct. "We were not afraid to fight them; but as we had come in peace, we did not want to do so! We were going to the great chief Kiyombo, and we would report to him how we had been treated!" Kisa had expected to frighten us into complying with whatever he demanded. But finding us thus using threatening language, and seemingly laughing at his warriors, he thought he had gone a little too far, and tried to disperse the mob.

His attempt was vain. Seeing there was no prospect of a fight, they became more insolent and ferocious. Finding how the wind blew, we, on our part, became proportionately confident; and on the crowd pressing threateningly upon us, I ordered the men to raise their guns, an operation which sent them back to a respectable distance. But more men continued to arrive in the village, and there were not wanting plenty to instigate the others to attack us. The chief, however, now did his best to quiet them, and finding his admonitions of no effect, he at last hit upon the happy idea of trying the effects of music upon the savage

breasts. Accordingly the royal band was turned out, consisting of sixteen players upon the pan-pipes, (the pipes varying in number from one to six, of graduated sizes, and emitting different notes), three drummers, and a player on a huge iron triangular instrument. With the drummers in the middle, they commenced circling round with a peculiar movement, swaying their bodies from side to side, each one having his hand upon the shoulder of the one in front. The players were graded according to their size, from small boys at the one end of the line to tall men at the other. At particular turns of the music they would stop, form a circle, and go through some curious pantomimic gestures. Sometimes I was made the centre of the circle.

This ruse on the part of the chief had the desired effect. The warriors were drawn away from their hostile demonstrations to watch the band. Gradually they began to drop off, and matters then assumed a more peaceful aspect.

'Our situation nevertheless still remained very critical. After we had once more put up the tent, crowds continued to perambulate the streets, howling and yelling. Several things were stolen; and some of my men who had gone down to the Luisi to bathe, returned without a scrap of clothing. The porters were panic-stricken, and dared not move out of their huts; and as no one would mount guard at my tent, I passed the whole day and following night cut off from all assistance in case of a sudden outbreak. Every

moment during the night I expected to see an arrow or a spear come whizzing in.

On the 9th we were still at Kwakisa, and again we were placed in a most perilous position. I was sitting talking over the situation with Makatubu when we were alarmed by a grand uproar, which every moment swelled in volume. Running out, I observed an excited crowd with one of the porters in the centre. He was being dragged along as if to be murdered, while our party were rushing with their guns to his assistance. These latter I ordered at once to return to their huts, as I feared accidents. Then pushing into the centre of the whirling crowd, I somewhat modified the violent usage he was receiving at their hands. But still they continued to advance; and thus surrounded, without even my revolver, and exposed to brandished spears and axes, we were dragged nearly the entire length of the village.

What was the cause of all this I was utterly at a loss to comprehend. But they seemed intent on killing my man, and I felt that I must do my utmost to save him, and to have the case heard. The culprit was one named Brahim, one of the chief Kiringosis. Though of a very dark hue, he had on this occasion turned to a pale ashy colour with fear. He had much reason to be terrified, as my presence alone saved him from immediate death. The principal leader in this affair, and who turned out to be the aggrieved man, aimed one blow at Brahim's skull,

which would certainly have smashed it but for a timely push of mine, which deflected the descending axe, so that it only sliced off a bit of flesh from his shoulder.

It took some half-hour before the tumult was sufficiently quieted down to allow of us hearing our own voices; and then it appeared that a trap had been laid to get us into a quarrel. When we arrived at Kwakisa, Brahim, with the innate gallantry of the Wangwana, had presented a woman with a string of beads, and she on her part made him a pot of porridge. It would seem, however, that the courtesies had gone somewhat further, with the knowledge of the husband, who meanwhile waited his time. Brahim, along with two others, had gone to bathe, when the outraged husband sprang upon him, and with the help of some of his friends gave him a most thorough thrashing, and then dragged him into the village, demanding compensation or his death. To prove the story the woman herself appeared. She was by no means an inviting specimen of her sex, as she was covered with several ugly marks and blind of one eye.

The chief eagerly seized on this business, and we had to pay dearly to both him and the husband, besides running a narrow risk of bloodshedding, which was only averted by not allowing the men to leave their huts during the worst of the row.

After three days' detention we actually got off, with the chief and one of his sons as guides. At the

end of a two hours' march we had to camp early at a small stream, in consequence of a frightful storm of thunder and rain. Kisa did not remain with us, but went off to a neighbouring village. On the morrow, as he did not turn up, we went ahead without him, expecting that he would follow. The country decreased considerably in altitude as we progressed.

In two and a half hours we reached a village. Again we met with a threatening reception. The drums beat; war cries resounded on every side, and in a few minutes several hundred warriors were around us, demanding why we had come without a guide or ambassador. Were we forcing our way through the country? As we behaved like lambs, and informed them that our guides were behind, they contented themselves with looking as fierce, and yelling as hideously, as possible.

Fortunately Kisa and his son arrived in a short time, and helped to put matters right. A hut was given to us, and while we were stowing our goods away the men stood round them, keeping off as gently as possible the crowding natives, of whose thievish propensities we had already had numerous lessons. While this was going on, an Mrua suddenly made a dive at the headcloth of one of the porters, and securing it bolted off as fast as he could. Of course the porter ran after him. Fearing some accident I shouted to the men to remain and guard the goods, while I hastened after the pursuer and pursued, to

prevent possible mischief. A crowd followed at my heels. The thief finding that we were gaining upon him dropped the cloth, but the indignant porter continued the chase in spite of my shouts. On a sudden turn being made I got between them; and just in time, for at that instant the Mrua stopped, fixed an arrow in his bow, and was turning round prepared to let fly, when he found me in his way. We thus stood only a few feet apart, he with his bow drawn, and the porter sheltered behind me. I thought every moment that I would be impaled by the poisoned arrow. Fortunately, however, he checked his impulse, as he did not dare go so far with me. He then moved round to get my man into line, but as I moved also he was no better than before. In a few minutes the chiefs along with Kiyombo's son, arrived, and made our position more secure.

After my experience at Kwakisa, and the evidence I had got of the character of the people, I dared not use my tent, and therefore occupied a hut instead.

The people of this village were of the most bloodthirsty and scoundrelly character, with such ugly faces, as to suggest that they must be the off-scourings of the criminal classes of Urua. Most of them had frightful sets of fangs instead of teeth, probably resulting from their habit of filing them. The women knock out two of their front lower incisors. Their eyes are expressive of low cunning, and their suspicious restlessness exhibits a decided want of mental or moral control. Curiously enough, more

than one half of them squint, a peculiarity not specially noticeable in other Urua villages.

I have already mentioned the Uguha custom of wearing immense iron pins or bodkins in their hair. The Warua carry this custom to a still greater excess. I here saw a fight, in which the combatants used these as weapons; and certainly they did not need any more cruel instruments. They stabbed away at each other most unmercifully until separated. The women do not hesitate to use them in this way freely. Sad indeed would be the fate of any one who roused the ire of a virtuous Mrua damsel. She would not scruple to pin a bodkin in the flesh of the offender. Many an unhappy Mrua husband carried only too plainly on his body the marks of something worse than henpecking.

In the evening we contrived to satisfy the claims of the chief, and Kiyombo's son; but we were so unfortunate as not to please the headman. He at once bruited his wrongs abroad, instigated the villagers to seize all we had, and kept up a warlike ferment. There were only too many of the same mind with himself, and we were fain to retire to our huts at dusk, and there to barricade ourselves in. As the men were unanimous in urging me to have some of themselves to sleep with me, I acquiesced. And it was just as well that I did so; for several vigorous attempts were made during the night to burst in the door of the hut, so that we had to sit up through the dark hours ready for the worst.

With pleasure we hailed the dawn after our dreary night-watch, but we hardly dared to go outside. We were rather agreeably surprised at finding that there were no difficulties raised to our proceeding without further detention.

After a three hours' walk through the forest we had to halt, while messengers were sent forward to inquire whether we should at once proceed direct to Makiyombo or halt at Kwamgoya, the village of Kiyombo's son-in-law. In three hours word arrived that we were to honour the village of Kwamgoya with our presence. Thither, therefore, we repaired. We camped at the outskirts of the village, where I pitched my tent. My men built themselves huts, and a native hut was given to us for putting our bales in. In the afternoon we arranged the question of the present, with apparent satisfaction to both parties, and a guide was promised.

In the morning, supposing everything was right, we made our usual preparations for starting, when we were rather taken aback by two pieces of news. In the first place, I had taken down my tent and packed my traps as if I knew where to go, and was quite independent of their guidance. This was entirely against their mode of procedure; and that I might learn that I was not in my own country I would have to stay another day. Secondly, the chief was not satisfied with the present I had given him.

There was nothing for it but patience again; so I remained, under protest. Throughout the entire day

we were surrounded by multitudes of people anxious to see me, and utterly regardless of my feelings. I tried ropes and men to ward off the crowd, but in vain. I endeavoured to keep my tent door shut, to shield me from the eager gaze of hundreds of rude savages; but the heat was perfectly stifling, and after enduring intense bodily and mental agony, I fled from my tent and took refuge in the small hut in which the goods were placed. There I thought to hide myself in the darkest corner, but the attempt was a failure. Though I put guards at the door they were too frightened to resist the crowd, and again and again it was burst open.. Then the roof was torn off at a hundred places, and on every side sharp questioning eyes peered in upon that curious animal, the white man. It became perfectly maddening; I yelled and stormed, and threw missiles of every description at the offenders. I feared I should become really mad under my tortures.

There are few things without a ludicrous side, and I got a hearty laugh even out of this experience. At one of the holes in the roof I observed a man who was so unfortunate as to squint both to the right and left, and his attempts to get me into his line or lines of vision were most amusing. He tried first one eye, then the other, and even both, but in vain. He got as much enraged at his inability to focus me as I was at being focussed. Then in his eagerness he began to tear the hole bigger and bigger, till I stopped him with my loud laughter. This seemed to astonish him

beyond measure, and probably made him imagine the devil must be inside. My tortures did not cease till sunset, when we contrived to get a little quietness so as to partake of some food, an operation which had always to be performed in the darkness, as the Warua chiefs betrayed an intense desire to become possessed of such articles as knives and cups.

In the morning we found that more difficulties had arisen, which required to be settled before we could go on. An Mrua had come into the camp overnight, and under the pretext of selling a fowl had stolen some beads from one of the men, who in chasing him had caught another man by mistake and charged him with the theft, though on finding out his error he at once let him go. Of course the Mrua could not let such a flagrant insult pass; his keen sense of honour had been touched by the imputation, and he must have satisfaction. He appeared as we were about to start, and began to "make trouble," demanding an ordeal, viz. the eating of poisonous bark, saying that if he had stolen the beads, then he would die; if he had not, then no harm would come to him. It was of no use to protest that the porter had made a mistake. To compromise the matter we paid a heavy fine.

Before this was settled rain came on, and our hopes of getting away that day seemed poor. I was again fined by the chief for innocently asking about the Lualaba. At midday the rain ceased, and we were then told we might go; but before we got off, the

man with the injured honour laid in another claim, and, reason or none, more cloth had to be given. The chief of Kwamgoya accompanied us on the way.

Ere reaching Makiyombo, we once more ran our heads against the treacherous wall of African customs and superstition. I asked our guide the chief's name, and then jotted it down in my note-book in his presence. He seemed to be much interested in the book and the writing. Thinking that this arose from his thirst for knowledge, I politely handed it to him for examination. The moment he had got hold of it he set up a wild halloo, and began shouting out that I was using witchcraft, and intended to bewitch him by putting down his name. In answer to his shouts the people crowded round with threatening gestures, and again we found ourselves in a critical situation.

Fortunately Kisa arrived, and took our side, telling how we always had taken the chiefs' names besides those of streams and villages, and explaining that no harm had come from it, but that it was simply to refresh my memory.

However, Engoya would not let such a fine chance of further extortion pass; and though I begged hard to get back my precious note-book, it was of no use; he kept possession of it. Only after several days did I receive it, on payment of a heavy fine.

After a short stoppage, while our approach was announced, we were conducted to an open space beside Makiyombo. Our reception was noisy enough to have pleased an emperor, the road being lined with

hundreds of howling and shouting savages. We got our camp formed with the utmost difficulty. First, the goods were stacked; then my tent was erected; and gradually we got a rope put up round the space where the men were going to build their huts. One half guarded this space, while the other half went to cut poles and grass for building purposes. The guards, however, dared not resist the crowd, and I had to keep perambulating round to prevent them bursting in, trying, with what blandishments I had at my command, to gain my point and yet keep them in good humour.

I was not allowed to retire for a minute, as that was always followed by a rush of the natives, who broke in whatever barriers lay in their way to get a sight of me in my tent. There was a very large number of drunken people.

Next morning, finding that the rope was perfectly useless, we set vigorously to work and made a huge fence of bushes and trees round our camp. When that was finished our next difficulty was to get the enclosed portion cleared of the crowd. That hard task we did at last accomplish. Intensely to my disgust, however, I found that instead of the fence protecting me, I had to pass my time in the sun protecting the fence; for the moment I entered my tent the crowd burst through all opposition and filled our camp. Several times this occurred, and I had finally to give the fence up to destruction. I tried ropes and guards, but it was of no avail; these were

immediately broken down, and the tent nearly torn to tatters. The porters in trying to keep the Warua back assumed the most abject whining tone that could be conceived, so that the people only laughed at them.

For two days we could hear nothing about Kiyombo. A veil of mystery seemed to hang over him. On the 16th of February he was to have visited me, but as he did not want his people to see what present I had to give him, I was ordered to repair to his house. Kiyombo, unveiled, proved to be a puffy, dirty little individual, considerably advanced in age. We found him sitting in a miserable hut, with a fire in the centre, and surrounded by his chief men and wives. As the people were crushing about the door, making such a noise that we could not hear our own voices, Kiyombo waxed wroth, and seizing a stick, laid about him right and left in a most undignified manner, much to the amusement of his subjects.

Quiet having been obtained, Kisa, as our introducer, began a most elaborate speech.

Looking around with much importance, he took a piece of hardened mud in his hands. Then he addressed personally each one present, rubbing his arms and breast meanwhile with the mud. After these introductory formalities, he commenced and told all that he knew about us. I followed with my speech, telling what we knew about ourselves. Finally, the doors being closed, I exhibited my present, which was accepted as satisfactory. Kiyombo, however, reserved his

answer about our future movements till another day. Meantime he wanted to make brothers with me, so that I should be his good friend, and no harm come to me in his country. This I agreed to do by proxy, and it was decided that the ceremony should come off on the morrow, when all the chiefs would be present to witness it.

Next day the ceremony was postponed, and we soon found that our course was not to be any smoother here than elsewhere. While bargaining with an Mrua for a knife, on which a good deal of native art had been expended, the chief's headman arrived, and seeing what was going on, raised a row, demanding how he dared sell his knife without the chief's consent. He then took possession of one half of the price of the knife, and went off to inform the chief of the transaction. This gave the latter an opportunity of "showing his horns," and he was not slow in seizing it. He sent down word that he was very indignant at my having bought a knife without his consent; and as a punishment, by way of teaching me better manners, I must give him a lot of cloth, a gun, and some brass wire. He would then see me to-morrow, make brothers, and finish words.

At midnight I was awakened by a messenger, ordering us to go secretly to the chief with the articles he had demanded. Though loth to turn out at that time of night, it would have been folly to resist. So I and two of my men meekly followed our guide. We found Kiyombo sleeping with one of his wives on

a bare mat, and without any clothes. A fire was burning in the centre, which filled the house with smoke. After the door was closed he examined the different articles brought, and then pronounced himself dissatisfied. I had brought everything but what he wanted; he desired certain kinds of beads and drinking-cups. We protested that we had none of the things he had asked for, and consequently could not bring them. After much wrangling we concluded the interview, the chief making me a present of a piece of smelted copper from Katanga, weighing twenty pounds.

Next day our hopes of passing through Kabuirè, or even getting to the Lualaba (from which we were now only about ten miles distant) were finally blasted. Kiyombo was at war with the people in that direction, and pass we could not. On hearing this, I felt as if I had received my death sentence. If we had to go back as we had come, without the chief's favour, how could we expect to run the gauntlet of the savages we had recently passed with so much difficulty. Formerly they were afraid to go to extremes, as they did not know how Kiyombo would receive me. But now, sent back in disgrace after the lion had got his fill, what were we to expect from the bloodthirsty jackals on our route?

Filled with these miserable forebodings of disaster, and probable death, I spent the day.

But we had not yet done with Kiyombo. He sent desiring to know why I had come to see him, and

yet brought nothing that he liked—such as cowries, metunda (glass rings), drinking-cups, &c. "When Arabs came, he knew what they wanted, as they bought his ivory, his goats, and slaves. But, as for me, I had come and bought none of those things. Now, what DID I want?"

Rather alarmed at this veiled threat, I went off to see the chief. As we approached his house, the sounds of a drinking-party were only too easily discernible, and did not bode much good for my mission. The hut was filled with men and women, all in a very exhilarated condition, and it was almost impossible to get in a word. The chief was specially jolly, and amused himself by looking at me with a funny leer. Every now and then, in drunken fashion, he came out with a long-drawn "M-m-m-zungu!" as if I was an object which at once raised intense feelings of pity and amusement. After various attempts to get to business, I gave it up and retired. In the evening I again returned, and found the party still deep in their potations, and the floor splashing with spilt pombe. This state of affairs gave no hope of reasonable conference, so again I departed.

Our object, now that we knew we could not get forward, was to get some person accredited from Kiyombo to see us safely to the Lukuga. With much difficulty and numerous presents, mostly of my own clothes, this was achieved, and we were promised a guide with special powers on the 21st of February.

On that date we actually did get leave to start;

but it would have been against all rule to let us away without some trouble, and accordingly, just as everything was ready for the road, a henpecked, wall-eyed-looking Mrua appeared, declaring that one of my men had given a present of cloth to his wife, a favour which he contended must have met with a return of a nature which outraged his feelings as a husband. Fortunately for us, the under-chief rather took our side, and after a deal of talk we all went up to Kiyombo, thinking this would be the most expeditious method of getting through the matter. After the particulars had been stated to the chief, he addressed the petitioner (who meanwhile was on his knees, and rubbing dirt on his arms and breast in the most abject manner) more as if he had been the culprit, instead of the injured husband, and ordered him to bring his wife, and to point out the delinquent. His wife, however, refused to attend; and as he could not point out the man, he was ignominiously dismissed.

Thus, then, we were allowed to depart, after a series of petty worries enough to reduce any person to permanent insanity. I had been plundered by the chief and his headman, till I had hardly an article or cloth left. I had been fined for asking questions, and for writing in my diary. My watch had been on one occasion only saved from being smashed as a "devil," by the payment of several cloths. My compass nearly had the same fate; for as they observed me one day looking intently at a hill in the distance and then

glancing at the compass, they supposed I was casting an evil eye over the country.

Night after night I had not dared to sleep, having to be continually on the alert; and during the day-time matters were usually even worse. I had been compelled to take all my food in the dark, so that my sole remaining cup, knife and fork, and plate, might not be seen. No available opportunity had been omitted of purloining whatever could be laid hold of, and on not a few occasions an open rupture had nearly taken place. Whatever we did we were sure to violate some custom or other, and had to pay dearly in consequence. We had little cause to wonder that the Arabs in Burton's time "had abandoned this line to debtors and desperate men," and that in our time neither debtors nor desperate men could be got to penetrate to Makiyombo, as we had foolishly done.

It would be difficult to form a correct estimate of the character of the Warua. I am inclined to believe that in spite of their extraordinary superstition, their idol worship, low cunning, and bloodthirsty villany, they are most intelligent, and in some respects the most advanced natives whom I have met. The chiefs see the advantage of trade, and would like the Arabs to return. But there is such a want of moral balance among the people, and they have such curious ideas about the rights of property, that they frighten traders from attempting to come among them, and so render commerce impossible. Their carvings are

remarkably bold and artistic. They use wooden bowls, which could not be more perfectly turned in Europe. These bowls are sometimes in the shape of animals, such as the pig, the back being hollowed out to form the bowl.

The Warua have a curious resemblance in many respects to the Monbuttoo, discovered by Schweinfurth near the Wellè. Their mode of salutation is most elaborate. An inferior in saluting a superior takes a piece of dried mud in his right hand; he first rubs his left arm above the elbow and his left side; then throwing the mud into his left hand, he in like manner rubs the right arm and side, all the time muttering away inquiries about their health. In making speeches the speaker always commences with the same salutation, and each time the chief's name is mentioned every one begins rubbing his breast with mud.

Though in most respects very cleanly in their habits, they are troubled usually with a plague of lice, whose monstrous proportions are probably owing to the fact that instead of washing they usually rub themselves with oil. Generally their spare time is occupied in entomological researches, after the manner of monkeys in the Zoological Gardens.

As I have already mentioned, Urua is a country of exceeding richness, producing throughout the year abundance of all the varied produce of Central Africa. Cassava, however, is their favourite food; it is cultivated very extensively, and grows to an immense size.

Goats, sheep, and fowls are common, but very dear. Black pigs occur about the villages.

A prominent feature in all the Warua villages are the numerous carved idols in small penthouses. No one ventures on a journey without a huge bundle of charms of all descriptions; and usually on such occasions a libation of pombe is poured out before the idol of their choice.

In spite of the tropical luxuriance of the vegetation, the country is markedly deficient in animal life. Though skins of monkeys are frequently seen among the natives, I never saw or even heard one of these animals in the forests. Antelopes are equally scarce, not even their footprints being seen; while buffaloes or elephants are never heard of. This latter fact somewhat surprised me, as the country was my ideal of what was suitable for elephants.

On receiving the news that we could not be allowed to pass through Kabuirè, I tried hard to be allowed to go and see the Lualaba, as it was only an easy day's march off. But they would not hear of it, and as they could not comprehend my reasons for visiting it, they only became more suspicious, and finished by mulcting me of more cloth. My request to be allowed to pass straight west to Lake Tanganyika was also met with a refusal. "It was their custom that when traders or travellers did not meet with favour in the eyes of Kiyombo they should return exactly as they came." So I was ordered to do likewise. I was somewhat relieved by the fact that Kiyombo's head-

man, who had already shown himself very friendly, and who was very influential, would see us part of the way.

On the 21st of February we commenced our return, and went along at a rapid rate, passing Kwamgoya, and camping beyond the village where we had been besieged all night. We skirted it, and so got past before our presence in the neighbourhood was known. We were careful to select a favourable position to resist attack, and had a strong fence and boma built, before the villagers became aware that we had arrived. All the necessary water was taken inside the defences. No one was allowed to go outside, and all intruders were warned to keep at a respectable distance, only a few being privileged to come to an appointed place to sell food. Thanks to this arrangement we passed a more peacable night than we had done on the previous occasion.

Next day we resumed our march, and reaching Kwakisa we also determined to keep clear of it and camp on the other side of the Luisi. The news of our approach had not become known, and when we entered the village most of the people were out in the fields. The war-cries and the beating of the drums, however, soon assembled the people, who came rushing after us, ordering us to stop. But we pressed firmly on, though several stones and arrows were thrown at us, fortunately without doing us any harm. Before the crowd had attained its greatest dimensions we reached the banks of the Luisi which proved to be flooded, and we required to use the "Agnes."

The natives had thought that we were quite at their mercy; and when they saw the apparently flat board opened out and assume the appearance of a boat, they became absolutely furious. They pressed forward to stop us; but we had fortunately arrived at a bend of the river, which required only a few of the men to defend it while the others were crossing. Taking six of my best men we formed a line across the point of land, and assuming a threatening attitude kept the savage crowd at a respectable distance, while the others by means of a rope were towed rapidly across to the other side. As boat-load after boat-load crossed the natives became more enraged, and would have commenced hurling their spears at us but for the presence of Kiyombo's head-man, who, partly owing to a good bribe, partly through threats, and partly also, on account of some real goodwill towards us, remained with our little band during this trying moment.

At last all but three had passed over, and the natives getting over their fear of our guns, were pushing forward, when back came the boat for the remainder. Nothing would have averted an attack now, but that all our men on the opposite side were standing ready with their guns and their last cartridges. The two brave fellows who had stood by me in this crisis now jumped into the boat, a place was ready for me, and with a whoop of triumph I slipped down the bank, tumbled into the "Agnes," cut the rope, and in a twinkling was at the other side, amid the shouts of

my men and the disappointed yells of the old wretch Kisa's warriors.

With the Luisi between us and them we felt all safe, and the crowd was soon dispersed by a storm of thunder and rain. I enjoyed a delicious sleep that night without fear of an attack.

Next day brought us back to Makihuyu. Kihuyu was not at home when we arrived, but appeared early the following morning, in time to stop our start. "We had passed last time without honouring him with a day's stay, and we must now do as he desired." I protested that we had lost too much time already, and that we must go on. Seeing us preparing to carry out this resolve, he gave the signal for the beating of the war-drums, and once more the ground was cleared for action. Resolved to make any sacrifice rather than stain my career with bloodshed, I submitted, letting him know that we were not afraid of them—which by the bye was scarcely true—but that, as we had come to see them and make friends with them, we did not desire to shoot them and make them our enemies; therefore to please him we would stay a day.

We were rather delighted to hear that there was a road direct to Tanganyika from Makihuyu, and that the chief would give us a guide that way.

During the day everything looked pleasant and favourable; but the night brought a different tale. I had just fallen asleep when a messenger arrived from the chief demanding so much cloth and so many

beads. These we gave him, and once more turned in, only to be awakened by further demands. Again I gave what was demanded; and a third time I was aroused by still more extravagant demands. This time he wanted a particular kind of bead, which we had not in our possession. He would not believe us. He declared we were telling lies, and that he would have his wish before we could be allowed to depart. Over this we wrangled till midnight, and left the question unsettled.

The following day was taken up with the same dispute, and as we still insisted that we had not the beads he threatened to have all our goods examined on the morrow, and then he would know whether we spoke the truth or not. This threw us into consternation, as we knew that whatever he saw which took his fancy, he would be sure to want it. Still protesting that we had not the beads, we offered him in lieu thereof a new kanzu, which pleased him vastly. He put it on over his bulky loin-cloth, and went strutting about with all the proper pride of a jackdaw in peacock's feathers. After receiving the kanzu he hinted that we might leave next day, so that we hoped we had staved off the threatened search.

Fearing, however, that some evil might come from all his ill-gotten presents, he brewed several large pots of pombe, and in grand procession carried them before his carved idol, and there offered up libations to the gods, mumbling away all the time, and asking to be kept free from harm. While watching this

scene, we prayed most devoutly that he might never have another day's peace of mind.

At midday our fond hopes were dashed to the ground. He now informed us that he was determined to see whether we had the beads or not. Fortunately, a happy thought struck me at this moment. I resolved to take advantage of a curious custom prevalent among the Warua. No one is ever allowed to see the chief eating his food. This is always done in solitary isolation, not even his wives being allowed to witness the great operation; and it is considered a great crime even to speak to him afterwards till he has silently taken up some straws, held them out to whomsoever he wants to speak to, and then broken them.

I first gave orders to Makatubu to place some enticing eatable in each box or package; and then, taking Kihuyu apart, I told him that I was quite ready to prove our truth by letting him see through our goods, but represented that it would be for his private advantage to examine the goods alone, so that his friends might not claim shares in the spoil. To this he gladly assented. Everything being ready, we took him into a hut, carefully closed the door, and then placed all our articles of barter before him.

The first box we opened contained a number of articles which we knew he would covet if he saw them; but on the top lay some sugar candy, to which we drew his attention, inviting him to partake of it as a great white man's medicine. At such a pro-

position he looked aghast, as if I had asked him to do something highly improper and scandalous. It was against all rule for the chief to be seen eating! We were, however, prepared to meet this difficulty. A large sheet was produced, which was held up in front of his majesty, where, unseen, he sucked and munched the sugar candy with immense relish, while we quietly smuggled all enticing articles out of the box, and by the time he had finished, we were ready to let him inspect the contents. We carried on the same dodge with the others, and thus, thoroughly hoodwinked, he retired disappointed in his expectations; while we, in the darkness of the hut, silently danced about in intense enjoyment of our triumph.

But though he could not get the beads he wanted, he contrived to discover that I had a drinking-cup and a blanket, and these he demanded, and would take no refusal. Any one looking into my tent in those days would have thought I was in a rather destitute condition, as not a thing was to be seen worth lifting. Everything that I valued was distributed among the men's parcels, to escape detection better.

On the evening after the search I got my tent torn to tatters, in consequence of my foolhardiness in lighting a small bit of candle to do something. The moment the light was seen through the thin canvas a shout went forth, and in a few minutes the entire village turned out in breathless amazement, came tearing down to see the curious phenomenon, and wrecked my tent in their eagerness to have a sight of

it, and it was only with difficulty I extricated myself from the ruins. I never lit another candle in Urua. The Warua never use any other light than their fires.

On the 27th of February we started on our supposed new route to Tanganyika. Before we left, the chief was so good as to inform me that a messenger had arrived from Kaunga, ordering that we should be sent direct back to Makaunga, and not allowed to go a new road; but he (the chief) had refused to listen, and determined to let us go whichever way he pleased. He told us this to show that he was not such a bad fellow after all, and we therefore thanked him for his courtesy.

Kihuyu's people, however, could not bear to see us depart without obtaining some mementoes of our stay with them. So they made a regular onslaught on us, tearing at whatever they could lay hold of, and were only beaten off after a terrible tussle, which I expected to see end in bloodshed.

We then continued our march, rejoicing that we would escape the extortions of Kaunga and Kasenga, of whose former attentions I had a lively recollection. We had a long and tiresome march along a path nearly quite grown up with dense brushwood and rank jungle, crossing several streams. After a tramp of seven hours we entered, with a sigh of relief, a large village, which we understood to be called Makaliba. Through the entire length of the village we marched till we reached the end, when to our immense astonishment

and chagrin we found ourselves on familiar camping-ground. In fact we had simply re-entered the village of Makaunga, and the old chief himself stood there to receive us, grinning with delight, in company with our guide who had so skilfully deceived us, and whom I felt inclined to strangle. Our chagrin was not lessened by the nature of our reception. Kaunga let us know that he was acquainted with our attempt to pass him by; but now we would have to wait his pleasure, and give, give, give till he was satisfied. Over this very satisfactory statement we were left to ruminate.

It will be useless to recount the next day's proceedings. We certainly had to give, give, give, until we had barely a cloth left, or an article of any description. In the evening after he had almost completely despoiled us, he expressed himself satisfied, and said we might go on the morrow.

At night, thinking that the place looked unusually peaceable, I resolved that I would try to get a really good night's sleep—a luxury I had been deprived of for several days. To allay the feverish excitement of my brain I took a good dose of laudanum, and turned into my tent. I was entirely isolated from all the men, who were sleeping in huts by themselves at different places in the village, and who had unanimously refused to act as sentinels about my tent.

About midnight I was awakened by a funny sensation. I felt myself being pulled along in the deep darkness by no gentle hands. Demoniac yells and madman-like laughs, howls, and cries filled the air.

Thinking that I was simply dreaming of being in lower regions I tried to shake off the sensation; but the pulling continued, and in a few seconds I felt myself outside the tent with the cold air blowing on my face. Unable to comprehend what was in the wind, I rubbed my eyes; but being just aroused from a narcotic sleep I could distinguish nothing. However a vague alarm seized me, and I jumped up. I was brought to my senses, and also into a sitting position, by coming bang against some object, which I recognized as the nose of a Mrua, who, apparently not knowing what he was dragging in my blanket, was so surprised by the blow that he also promptly sat down. Both he and I realizing what was the matter, I clutched at my blanket and jumped up; while he took to his heels. Setting up a yell for my men, I rushed into my tent, knocking against some more of the robbers, who overturned the tent in their excited endeavours to escape.

Groping for my gun, which I fortunately found safe, I struck a light. I then discovered that several articles had been stolen, my watch among other things. A few of my men now arrived in answer to my shouts, and I learned that they were all in the same predicament as myself. They were now besieged in their huts, which the Warua were trying to enter by force. The porters would have to use their guns if help did not soon arrive. To relieve these we now set ourselves.

Four men were left to guard our goods in a strong isolated hut. Then with five others we came down unawares on the nearest crowd, and with yells of

"Mzungu! Mzungu!" we scattered the crowd, and reached the first lot of porters. These now joined us, and after a hazardous march through the village, surrounded by the mad crowd, we succeeded in rescuing the rest of the men, though few of them had much clothing when we got back to our first point.

Here we arranged ourselves for fight or flight—thirty men amongst three hundred bloodthirsty and excited warriors, all yelling their war-cries, brandishing their spears, and aiming arrows, and otherwise raising an uproar truly devilish. We remained calm but determined; and the savages, after dancing about us for several hours, gradually became quieter and began to disperse. Still, to be ready for a surprise we remained under arms till daybreak. Before this, however, we had got an opportunity of speaking to the chief, and raised his fears of the dire consequences to the whole district if he kept my watch. At daybreak, thoroughly frightened by our threats and the inexplicable ticking of the precious little machine, he brought it back, just ten minutes before it ran down and stopped its life-like motion.

We waited no longer at Makaunga. At the first peep of dawn we incontinently bolted, thankful that we had escaped with our lives. On reaching Makasenga, where our troubles had first commenced, we were received with one of those delusively pleasant receptions to which we had now got accustomed. The chief was all smiles and sympathy. But we found

only too soon, that it all arose from his supreme satisfaction at getting us once more into his power. So on one pretext and another I was detained four days, during which he completed the work of plundering me. He left me with but one shirt and suit of clothes; and only a few yards of cloth remained to take us to Mtowa.

The worry I endured was past comprehension. When I look back on it I think I must have been possessed with the patience of Job, though I find some rather bloodthirsty desires recorded in my journal, such as the infinite pleasure I would have in burning a few villages, or devastating some fields. Here and there I discover such observations as—"Oh, that I could get out of this cursed country, away from the howling, quarrelling, and 'madding crowd,' into the jungle or the forest, where nature reigns supreme, no harsh sounds to grate on the ear, but the soft all-pervading voice of the Supreme, heard sighing soothingly among the trees, or in the waving grass, the babbling stream, the sweet notes of the birds, or the hum of insects. This were paradise compared with my present existence where 'only man is vile.'"

Among other beliefs which obtain among the Warua, I may mention that to spit before any one is considered a great crime, as being an attempt to bewitch that person. Not knowing this strange belief, I did on one occasion perform this operation, and was much amazed to hear the cries of astonish-

ment and anger the simple act raised. It is also believed that if any water is carried away from a district, rain will cease falling there.

On the 5th of March, we left Makasenga, and by a forced march reached the river Nyemba, which we crossed and then camped. Without further trouble we crossed the Lukuga; and it was with a great sigh of relief we stepped out of the boat on the northern side of that river. While we were in the thick of our difficulties in Urua, a certain excitement buoyed us up, and prevented us from thoroughly comprehending the extreme danger we were so constantly in. But when once in safety, and looking back, we felt that we had passed through a very valley of death. Our escape seemed a perfect marvel considering our small force, the want of ammunition (a fact which all through was carefully kept secret), and the cowardliness of the porters, who, however, were forced by circumstances to assume the virtue of bravery though they had it not, and to stick to me through thick and thin, well knowing that it was only the awe inspired by my character as a Mzungu which gave them any chance of safety.

The Makalumbi people were for detaining us till their chief, who was at a distance, arrived, but I was not so much in their power now, and could snap my fingers at them. Two long marches brought us to the river Kaca again, near Miketo.

I here resolved to send such of my men as had loads right on to the mouth of the Lukuga by the

way we had come, while I with those who had no loads would make a forced march by Miketo and Ruanda to Mtowa, get some stores if possible, and then meet the remainder of my party, and return to Iendwe along the side of the lake. On divulging this scheme to the men, I was surprised to find them utterly opposed to it. They declared that they were determined not to divide, and that they would either all go to Mtowa or all along the Lukuga. I had been given over to them by Dr. Kirk, they said, to be taken charge of, and not to be left on any consideration. If any harm was to come to me, how could they go back and tell the Baluzi? I argued in vain. They would not listen to my reasons; whereupon I became exasperated, and determined to punish them for their wilfulness. So I said, "Very well! let us all go to Mtowa!"

Next day, on the first appearance of dawn, I started off in front, with Uledi my gunbearer, as fast as I could walk. We marched through the lovely and fertile valley of the Kaca, a piece of country charmingly wooded and well cultivated. Passing Miketo on our left, we pushed on rapidly over hill and dale, and crossed the range of hills which runs north from the Lukuga and separates the basins of the Kaca and the Luhanda. Rain and thunder came on about ten o'clock, making it most miserable and uncomfortable to push through the thick jungle. But, irritated as I was at the obstinacy of my men, I resolved to try whether we would all go to Mtowa

together. So on I hurried, crossing hills and swollen streams, pushing through tall jungle grass or through tangled forest. I became lame, and my feet blistered terribly; but for thirteen hours I continued as fast as I could walk. At sunset, with my gunbearer I reached the Lugumbu, or Luhanda, through which we had to wade up to our necks, stopping shortly after at a village called Kalumbi.

By that time it was dark, and we had some difficulty in making the natives understand who we were. Eventually, however, we got an empty house and the present of a huge pot of pombè. At a miserable fire we settled down, and tried to dry our drenched clothes.

In answer to our gun-shots, three or four of the men arrived. They reported that the others were dead beat, and had camped in the wet forest without food or shelter; whereat I was brutal enough to rejoice and feel the pleasure of vengeance, though I was suffering as badly myself, lying in wet clothes, shivering with cold and no food.

Next morning about nine a.m. the rest of the party arrived, and without waiting, off we once more started, though I tramped in agony with sore legs and feet. Crossing a considerable affluent of the Lugumbu we ascended a very steep hill, traversed an exceedingly rugged tract of country, descended to the plain of Ruanda, the town of which we reached at two p.m. Here the men collapsed completely. They declared they could not move another step, and go

they would not. Exulting absurdly in my triumph, I laughed, and reminded them of their determination that they would all go to Mtowa. Now I was going there! Why would they not come on?

They were completely beaten, and would not move. So off I started with only my servant. Crossing the range to the south of Mtowa, I met Mr. Hutley at the foot of the hills, riding on a donkey. He was going to Ruanda, and at once came off the animal for my benefit. Thinking that this was a very becoming mode of locomotion for a defeated traveller, I bestrode the meek but stubborn animal, on whose ribs I vented a good deal of my spleen, and thus I re-entered Mtowa, not like the young lion who had left it two months before, but like a sheep from the shearers.

CHAPTER IV.

TWO HUNDRED MILES BY CANOE.

The despondency which possessed me on once more entering Mtowa, after the signal failure of my attempt to reach Iendwe by a new route, was soon dissipated by the information that Mr. Hore was every day expected from Ujiji on a voyage to the south end of the lake. This was pleasant news to me, as I had no doubt that Mr. Hore would at once offer me a passage in his canoe to my camp, and thus relieve me of the arduous task of returning by the way we had come. It was clear, however, that there would be no room for more than one or two of my men, and therefore, as their services were now of no special value, they would have to return to the coast by way of Ujiji and Unyanyembe.

Without loss of time then I despatched a messenger to Ruanda, ordering the porters up to Mtowa. An Arab canoe was about to start, and I chartered it to convey them to Ujiji. On their arrival each one was supplied with cloth to buy food on his way to Zanzibar, got his discharge-paper, and was shipped on board. I regretted very much to have to part

with the good fellows who had stuck so well to me through thick and thin; I was greatly pleased also to see that the feeling was mutual, and that they would have preferred to continue with me. But under the circumstances it was quite impossible, though, as it will be seen afterwards, we ultimately did all march to the coast in company.

I was thus left at Mtowa with only ten men, waiting impatiently the coming of Mr. Hore, as I began to have vague fears that my men at Iendwe must have given me up for lost and returned homeward.

At this season of the year, March, we found the temperature very low, allowing us to move about without much discomfort all day. The difference of the heat here as compared with the Congo valley was very marked. We even at times shivered with the cold, and were glad to shut the doors of the house when the breeze was blowing.

During my stay at Mtowa news arrived that the Roman Catholic missionaries had been getting into trouble in Urundi, north of Ujiji, where they were regarded with intense hostility by the natives. These had even asked the Ujiji Arabs to help them to expel the missionaries. This feeling would appear to have arisen from the secluded and exclusive habits of the priests, who never enter into familiar relations with the people, not even allowing them to visit their houses, and driving them away during prayers. Such conduct will never do with Central African negroes,

who are accustomed to a wide republican freedom, and expect to be allowed to go into any house they may have a fancy to, and sit down as if it was their own.

To occupy our time till Mr. Hore's arrival, Mr. Griffiths and I organized a hunting expedition to the island of Katenga, where the natives report the existence of an animal with branching horns, which must either be a deer—an animal unknown in Africa —or else a very strange antelope. We took with us two of my men and Mr. Griffiths' cook, in the mission canoe. On getting out into the open water we found the breeze stronger and the water rougher than we expected, so that to make any headway at all I had to set vigorously to work with a paddle. After a very hard pull we reached the little island of Kasengè, which being cultivated and devoid of trees has a much lighter green colour than the surrounding islands, which are densely wooded, so that it looks like a sapphire surrounded by emeralds. It is of a low conical form, and though of but a few acres in extent, it supports several families.

Re-embarking, we had a stiff pull across an exposed channel, causing me to blister my hands with the unwonted exertion. We landed on a small island, where we found a deserted hut. This we took advantage of to cook some food—Indian corn porridge and fowl roasted over the fire. Before we had finished, the breeze turned into a storm, so we had to pass the night amidst loathsome things innumerable.

Next day we reached the desired island, but we hunted in vain. Eager to see the wonderful animal we had heard of, we performed Herculean tasks in our attempts to penetrate the jungle and forest, to cross the swamps, the hills, and the valleys. We spent a most agonizing night in a swamp, where mosquitoes in clouds drove us nearly mad. They did not allow us a moment's sleep. We rolled about, scratched and rubbed our faces or any exposed portion, wrapped blankets round ourselves till almost suffocated, only to find that we had also wrapped some of our tormentors inside.

In the morning it was some time before we could see each other, as our faces were swollen, till hardly any particular feature was recognizable. When we were able to see and to condole with each other, we found that we both had come to the conclusion during the night that Mr. Hore must have arrived, and it would be well to return to meet him. So, forgetting the buffaloes and the strange animal, and the prospective fine sport, we hurriedly tied up our traps, and jumped into the boat with delight, glad to escape from that horrible swamp.

We reached Mtowa again at three in the afternoon, and found that the expected one had not yet appeared whereupon we expressed our annoyance at having lost such fine shooting as we affirmed we would have had.

At night, after we had just turned in and fallen asleep, a messenger came with the news that Mr. Hore was coming into the harbour and was signalling.

We all flocked down to the beach and showed the landing-place by a lamp, and in a few minutes we were shaking hands once more. His canoe, admirably named the "New Calabash," was rigged in European fashion, with two masts, and a foresail, and on the whole was a wonderfully civilized-looking craft, though only a dug-out with an extra plank or two. He had had very severe weather in crossing, and the rotten old log had sprung a leak in several places, and was generally in a bad way.

I was rather amused to learn that my men, by way of a practical joke, had informed Mr. Hore that we had met all sorts of disasters in Urua, and that I had returned to Mtowa in a primitive costume, consisting only of a cotton loin-cloth, after having lost all my goods, journals, papers, maps, &c. Believing this, Mr. Hore, with his wonted generosity, had immediately bundled together a lot of clothes, boots, note-books, &c., and brought them with him for my benefit.

The weather for the next few days continued very stormy and unsettled, and did not promise a pleasant or safe voyage. The atmosphere was singularly clear and transparent, so that objects could be seen with remarkable distinctness at great distances. Thus Ras Tembwe, at a distance of nearly fifty miles, could easily be distinguished; Kungwe, with its noble peak and flanking hills, seemed but a few miles off; and even the insignificant island of Bangwe, north of Ujiji, could be plainly discerned sixty miles

away. The charming colours which tinted the landscape were really too exquisite for description, and gave the whole a fairy charm that can never be forgotten.

Mr. Hore in receiving me and my men put himself to a considerable amount of discomfort, and had to leave many of his own things behind to make room for us all.

On the 23rd of March, the "New Calabash" having been put to rights, we went on board in the afternoon, and, with a light breeze and swell right ahead, we pulled out, after bidding a cordial farewell to Messrs. Hutley and Griffiths.

As we were to visit Karema on our way, to assist the members of the International Association (who are generally supposed to be stationed there to assist, not to be assisted), we directed our course across the lake towards Kungwe. As this is considered an important feat, every man laid himself with a will to his paddle-like oar, and with a resonant song sent the boat merrily through the water in spite of wind or swell.

Mr. Hore, who lets nothing escape his notice, drew my attention to the effect of the broad patches of green vegetable scum floating on the water, producing a smooth surface, and causing the swell to pass quietly under the canoe without breaking, having thus the same effect as oil on the water.

At sunset we had only reached the middle of the lake, yet the men had to keep steadily pulling away,

as the breeze and swell were ahead. The night was clear and starlit, with the moon at its full, and throwing a flood of silvery light, like a shining pathway from the dim distant hills of Uguha to the grand and sombre peaks of Kungwe in front. A cool breeze blew over us, and the only sounds heard were the monotonous dash of the water, an occasional refrain from the men accompanying their splashing oars, or a word of encouragement from our captain, who never once let go his hold of the helm through the weary hours.

At the stern of the "Calabash" Mr. Hore had constructed a sort of box or locker. Into this I crept to get a sleep, but I never repeated the experiment. All night long I dreamt of being buried alive in a coffin; and when I awoke I could with difficulty divest myself of the notion, as I felt myself enclosed on all sides. The incarceration was horrible.

Early in the morning we found ourselves creeping under the shadow of Kungwe. The clear night had changed into a threatening daylight. The clouds overhung the lake to the west like a pall, and over Kungwe were piled many-shaped fleecy clouds, all in a blaze of fire from the rising sun, which was driving the black shadows of night away into the deep glens and gorges of the mountain sides. It had all the appearance of some grand volcanic eruption in which flames and steam formed the principal features.

After twenty hours of ceaseless rowing we camped at ten a.m. for food and rest. As we pulled near

shore I shot at and wounded a buffalo, but could not follow it, as the ground proved to be too marshy. The rocks we observed to be gneiss and mica schists.

At five o'clock we started again. The wind was off shore, and the night fine. So we went merrily along, till, finding a nicely sheltered nook south of the Kigubwe River, we pushed in behind some giant spear-grass, and anchored at the mouth of a small stream, which has been named after the "Calabash." From this point the higher mountains recede from the shore, and are seen only at variable distances inland.

Owing to a squall we did not get away from Calabash stream till four p.m., when we set out with a fine breeze, and with hopes of reaching Karema during the night. It was dark when we touched the island of Kaboga; and as there are many rocks just half covered, we had to keep a very sharp look-out.

Since Cameron's visit, this island has been taken possession of by Ruga-Ruga, or robbers, from whom Captains Carter and Cambier had a very narrow escape. These gentlemen had been to Ujiji for the double purpose of seeing Mr. Hore and buying goats, fowls, and rice. Heavily laden with these, they commenced their return to Karema in the "Old Calabash" —the same boat in which I had crossed from Ujiji to Mtowa in January. They encountered a squall north of Kungwe, and were nearly swamped, besides having all their live-stock drowned. After several

days' delay in refitting, they once more resumed their voyage. On arriving at Kaboga a strong breeze was blowing in their teeth, requiring constant exertion to keep moving ahead. As they were passing between the island and the mainland, Ruga-Ruga suddenly appeared, and commenced firing on them from both sides. The Wajiji boatmen of course dropped at once to the bottom of the boat, which being thus left to the mercy of the winds and waves began rapidly to drift on shore, where the natives were ready to receive them. Not relishing the prospective reception, Captain Carter, with his unfailing rifle, shot one or two of the savages, compelling them to retire, and then by threats of treating his own men likewise, induced them to resume their oars. As they paddled for life, they made the "Old Calabash" push through the water as it probably had never done before. Another minute of inaction, however, and they would have been grounded and at the mercy of the robbers.

During the night, having cut across the bay of the Luguvu, where Cameron imagined he saw coal, and got considerably on our way to Karema, we noticed the sky beginning to assume a most threatening aspect. It gathered in the ominous manner I have already described in treating of my passage from Ujiji. However it was night this time, and the frightful appearance of the coming squall was sufficient to inspire the boldest with awe. We were at that time near a rocky and exposed shore, which could only be

faintly discerned in the gloom, though the thunders of the breakers were borne only too distinctly to our ears. There was no hope of shelter except by running back as far as the Luguvu. But even that would be difficult, as, owing to the direction of the wind, we would almost certainly be driven on shore before we could reach the river. The Wajiji, however, knowing no other way of meeting a squall than by precipitate flight, clamoured for a retreat.

Our captain, who could understand the chances better, would not listen to them. He determined to fight the storm, as he had done on several occasions before. To the unbounded consternation of the Wajiji, he put out to the open water, to have more sea-room before the battle commenced, as we were at that time too near shore. We did not get away from the shore a moment too soon. The calm which preceded the storm gave way to cold blasts. The stars were blotted out, and the whole sky was covered over with an inky blackness, broken only by occasional flashes of lightning. We could not see twenty yards ahead, and the men cowered down in helpless fear at the bottom of the boat. I should have been thoroughly frightened myself but for the cool self-possession of Mr. Hore, who sat sternly and unflinchingly at the helm. We were barely clear of the coast when the storm fell upon us in all its fury, while a terrific sea rose, and threatened to smash the "Calabash" to bits as each heavy wave struck it with a dull thud.

For about three hours we went at it, tacking about, making no headway, but yet keeping our place. Anxiously we looked for break of day, to guide us to some shelter. Slowly old Sol rose above the horizon, but only to reveal an inhospitable coast, and no improvement in our position. However, the wind lulled after dawn, and with a grand spurt we were enabled to get into shelter some ten miles north of the Musamwira river.

We were all pretty well exhausted for want of food and rest after our night's experience, and were glad to take what came to hand without grumbling, and then attempt to sleep with as much comfort as the greatest number of acute angles in the smallest possible space would permit,—for Mr. Hore was a stern disciplinarian, and would allow no putting up of tents or disarrangement of his quarter-deck for effeminate repose.

In the afternoon we started for Karema. On arriving before it we found it impossible to get near the shore owing to the exceeding shallowness of the water and the extreme abundance of the tree stumps and snags, which threatened to run a hole in the boat, as it was as soft and easily penetrated as a bit of cheese. All the men were turned out of the boat, to run their chance of crocodiles. After poking about carefully for more than an hour, we despaired of getting a safe entrance. I fired two shots in the hope of attracting attention. In answer, we were delighted to see a light at some distance, and,

making for it, we heard some indistinct shouts in reply to our own.

At last a jolly "Halloo!" rang across the water, which we had no hesitation in recognizing as Captain Carter's, as no Belgian ever had the energy to produce such a sound. This we replied to, and in a short time we were near enough to open up communication, and, finally, to shake hands with one who could have been identified as an Englishman by the very vigour of his grip.

Carter had just come down from Karema, which is about two miles inland, to shoot hippos. We found him comfortably camped on the top of a small ridge, to which he conducted us. In a few minutes the best dinner he could provide was placed before us. Thereafter commenced a night of talking, in which each one detailed his varied experience of African travelling, and ransacked his memory (and his imagination several times, involuntarily or by mistake) for wonderful stories of his deeds by flood and fell, or among wild beasts, or equally savage men. Such a meeting a thousand miles from the faintest trace of civilization is one which can never be forgot. We drew to each other like brothers.

Towards morning we reluctantly separated, Mr. Hore to his beloved and greatly treasured "Calabash," from which nothing would tear him, and I to my tent pitched on the hill, where I was glad to escape from the discomforts of Hore's idolized old tub. During the night, however, the mosquitoes

which swarmed about made my existence uncomfortably lively.

At daybreak I was out, anxious to get an early view of the first station of the International Association for the opening up of Africa, where civilization, Christianity, trade, and all good and great things, are to be introduced to the notice of the benighted negro; where the weary traveller is to be entertained, encouraged, and strengthened in his work, assisted with stores, provided with porters; and which in fact is to be a centre from which will radiate all that is best and most commendable in European civilization.

That all these great things may be achieved we naturally expect that the spot chosen shall have many advantages. It must, in the first place, be healthy, and on a good soil, well wooded and watered. It must be surrounded by a considerable population of a peaceful character, with abundance of food obtainable; also it must occupy such a position as to be a good centre from which to radiate out to other and more distant parts. Being on the lake also, it must have good shelter and anchorage available for large-sized boats, and which can be entered in all weathers. It is also to be expected that the agents of such a station shall in every way show that their mission is essentially a peaceful one, and that they have come there solely for the benefit of the natives, and not to take the country from them. Now, with these requirements before our mind, let us step forth from our tent and see how far they are fulfilled in the station of Karema.

Let the reader imagine himself standing on a small hill, at an altitude of 150 feet above the lake, which lies round its base to the west and north, while a noxious marsh completes the circuit of the hill on the land side. To the south extends a low ridge, treeless, but dotted over with scraggy bushes and large boulders of gneissic rocks. To the north-east we look across the mouth of the Musamwira river, which is here in the form of a broad impenetrable swamp, extending for several miles to the distant hills of Kawendi. Right in front, to the east, a spur of the low ridge already mentioned blocks our view; but ascending to its top we further scan the horizon. Nothing is seen but a great treeless expanse, utterly devoid of a single redeeming feature, extending away to the mountains ten miles off. Through this the Musamwira flows, transforming the whole during the wet season into a wretched marsh.

From the midst of the plain, curling smoke is seen to rise, which indicates the position of Karema almost hidden by the giant grasses, and showing next to no evidence of agriculture in its vicinity. Sweep the wide horizon, and nowhere else is a village seen; in fact within a radius of twenty miles there are not more than three or four very small hamlets. To the north we have the devastating robbers of Kawendi. To the north-east Simba is a name of terror to all peaceable people; while on the east the notorious village of Makenda has a reputation for plunder not much inferior to those just mentioned.

We have thus the small village of Karema, situated in a swamp surrounded by a broad strip of uninhabited desert, with bordering mountains, and an outer circle of robber chiefs.

But let us return again to the small hill. This is the site chosen for the station. The difficulties of its approach by water have already been described in detailing our own experience. All that needs be added is, that during a squall or a stiff breeze no boat could possibly enter, as even in the calmest weather it is almost impossible to get through the snags and sandbanks, which abound both beneath and above water.

Withdrawing our attention to the hill itself, we cannot but be struck with boundless astonishment at the military preparations in progress, and we almost begin to think we are getting back to Europe. As if the marshes and the lake were not sufficient defences, a complete system of fortification has been commenced on the most scientific principles. There are trenches, and walls, and forts being rapidly formed, as if a European army was expected to come up against it with siege guns; and yet there are only a few small villages within a radius of twenty miles. Perhaps once a week a wretched native may be seen wandering past. He gazes with puzzled wonder at all this incomprehensible digging and building, goes home, calls his friends about him, and then uttering pityingly the one word "Mzungu" (white man), he significantly taps his head.

But, my readers will say, Surely there must be some compensating advantages. There may be; but I confess I have not been able to discover them. The station is entirely isolated from all trade routes, the nearest being the line from Unyanyembe, through Fipa to Ulungu and Iendwe, and indicated by my own route on the map. Karema is a great distance to the south of the road from Unyanyembe to Ujiji; and, strangest of all, it is completely away from the route to Nyangwe on the Congo. Indeed, the gentlemen of the first expedition seem to have exercised a perfectly wonderful ingenuity in discovering a place totally unsuited in every respect to advance the objects of the Association.

But we have not yet finished. Absolutely the only food to be got at the village of Karema is Indian corn, as there is not another article produced. There are no fowls, sheep, goats, or cattle; and everything they eat has to be brought either from Ujiji or from Unyanyembe, at great expense.

Then again, they have succeeded in raising an intense feeling of hostility against themselves. Not a single native will move his little finger to assist them for either love or money, so that everything has to be done by Waswahili from the coast, paid at very high prices.

The great civilizing station of Karema, then, may be described as situated on a hill inaccessible from the lake, surrounded by a marsh and a great uninhabited jungle, the favourite haunt of clouds of

mosquitoes and other insect pests. There is a very small and intensely hostile population. There are no food supplies, or timber-trees, and the district is bounded by robber chiefs. It is far from all trade routes, and totally unsuited as a starting-point for travellers. The gentlemen stationed there have a haughty disregard of the feelings and customs of the natives. They seem to have no real interest in the professed objects of their mission, and have found it necessary to fortify themselves in case of war.

And now it may be asked—How have the Belgians committed such an atrocious blunder? It seems to have been in this way. On arriving at Zanzibar they had the misfortune to lose at the very outset their two principal men. On the way up country they met with innumerable disasters. Their porters deserted. They got into trouble with the natives. A third white man died, and a fourth returned home. They seemed to have no definite instructions, for now we hear that they are going to Mirambo, now to Ujiji, and anon to Nyangwe. At last, however, after having wandered for about two years like lost sheep, we hear that they are directing their steps to a place called Karema by Stanley, and described by him in glowing terms as being admirably suited for such a station as the Belgians proposed to establish. They accordingly get guides to take them to Karema. Thither they are conducted, only to find, to their intense surprise, that it is totally different from Stanley's description. But being soldiers, and

having been ordered by their king to form a station at Karema, they do so without troubling themselves about such questions as its suitability, or whether a better place could be got. So they content themselves with abusing Stanley; and, with the consolation that they have done their duty, they settle themselves down with philosophical resignation, and are now impatiently awaiting the coming of the "African millennium."

The discrepancy between Stanley's description of Karema and the reality arose simply through a confounding of names. The place which he described was not Karema at all, but Massi-Kamba, twenty miles south of Karema. Massi-Kamba exactly answers Stanley's description. The Belgians, not knowing that there was any mistake in the names, and having asked to be taken to Karema, were of course taken to the real Karema, where they settled themselves down, apparently without even troubling themselves to study their maps. Strange to say, they never discovered their mistake till Mr. Hore and I arrived and unveiled the blunder that had been committed. If they had taken the trouble to look a few miles further north or south they would have discovered many places much more suitable. As it is, they could not have chosen a worse situation if they had marched round Tanganyika for the express purpose of seeking a place where they might live in uninterrupted mortification of the flesh, far away from even savage society.

Captain Carter, the gentleman whom we met at Karema, it will be remembered was the person engaged by the King of the Belgians to test the suitability of elephants as means of transport in East Central Africa. For this purpose he started with several of these animals from the coast a month after the East African Expedition. On the way they all died except one, and that one proved conclusively to my mind the utter unsuitability of these animals for the work required of them in such a country, though I am aware that Carter himself held much more sanguine views on the subject. We found Carter to be a fine warm-hearted Irishman, ready to face any hardship or danger, full of anecdote and humour, and of the most buoyant temperament. If he had a fault at all, it was simply that he was perhaps a little too impulsive for the exigencies of African travelling. He brought up under his protection a Captain Popelin, who was in charge of a large caravan of stores for Karema, and intending to go on to Nyangwe. When he got to Karema, however, he thought he had gone sufficiently far, and was afraid to continue his journey.

Early in the morning following our arrival, a messenger was sent over to the village where the Belgians had their temporary headquarters, to inform these gentlemen of our appearance, and in about an hour they came to see us. Cambier, the head of the station, and sole survivor of the first expedition, is a somewhat slight, pleasant-looking gentleman,

and showed some interest in the work in which he was engaged. Captain Popelin on the other hand was tall and stout, and somewhat hearty in his behaviour. He evidently laboured under the idea that all he had to do was to come out to Karema for a certain number of years, live as comfortably as possible, and then return. Nothing however amazed me more than their utter want of the most rudimentary knowledge of the geography of Africa.

By invitation of these two gallant captains, we proceeded to Karema to dine with them. Accompanied by Carter, we crossed the rocky ridge which lines the coast, and reached the edge of the marshy plain of the Musamwira, where we were received by the only remaining elephant, which had only survived because it never had to carry any loads. We respectfully saluted the noble animal, and in response it raised its trunk. We then mounted its back, and off it set at a swinging walk, which shook us considerably, and filled us with innumerable pains. It moved with great care on the soft places, always carefully feeling whether it was safe before putting its whole weight on the ground.

Crossing the river, we soon reached the strongly palisaded village, where we were received by our military friends and conducted to their mud huts. These are placed in the very centre, and in dangerous proximity to the other huts, which in case of fire would be burned to ashes in a few minutes. In their numerous quarrels with the natives, the latter have

frequently threatened to set fire to their village and burn them out.

We here met the melancholy remnant of a large Roman Catholic missionary party and had another illustration of the strange vicissitudes of African travelling, and of the unsuitability of the continental people for such work. Starting from Zanzibar about eighteen strong, they had a variety of the usual troubles. On arriving at Unyanyembe they all became ill, and three died right off. The party then divided, one section to go on to Victoria Nyanza, and the other to join Père Denaud at Ujiji.

Of the latter, one died after they left Unyanyembe. The porters deserted them, and the natives robbed them of nearly everything. Then they got into difficulties at Simba's, from which they had to flee with a very few servants, leaving everything behind. They arrived at Karema nearly starved, and of the three, one was blind, and another mad. Only the third was able to make an appearance when we visited the station. Strange to relate, the Belgians, regardless of the objects for which they were sent to Karema, were for giving them the cold shoulder, and would have left them to extricate themselves from their difficulties as best they might, but for the indignant protest of Captain Carter.

It was a rather remarkable party, which, on that day of my visit, sat down to table in that out-of-the-way place.

There was Captain Cambier, a Belgian—(head of the

first Belgian Expedition, of which three had died and one had returned). 2. Captain Popelin, a Belgian (head of the second Belgian Expedition—of which one had returned). 3. Captain Carter, an Irishman (leader of King Leopold's Elephant Expedition; one man returned). 4. Mr. Hore, an Englishman (leader of the London Missionary Society's first Expedition to Tanganyika, of which two had died and one had returned). 5. Myself, a Scotchman (commanding Royal Geographical Society's East African Expedition, of which the original leader had died). 6. A French Algerian, name unknown (leader of the Ujiji section of the Roman Catholic Mission to the Great Lake, of which one had died, one had gone blind, and another mad). Such a list surely tells a sad tale of trial and utmost hardship, and speaks volumes.

But our feelings at such a meeting were not by any means of a gloomy cast. Round went the anecdote and story with utmost vivacity and jollity, and a more thoroughly enjoyable meeting could not have taken place anywhere. While at dinner and disposing of such good things as our hosts could lay before us, we were suddenly startled by some most familiar sounds, which almost made us jump to our feet. Mr. Hore and I looked at each other with mutual astonishment, and simultaneously exclaimed, "Good gracious! A hurdy-gurdy!"

So indeed it proved to be, and we sat entranced as that well-known instrument rolled out some old familiar airs. The effect was most pathetic. As

we listened our thoughts were carried away back to the streets of our native towns where we reproduced well-known scenes as if by magic. Ever since, I have looked with much more respect on that much cursed instrument, and have always been more inclined to put my hand in my pocket to reward the operator.

It may be remarked that this was the hurdy-gurdy brought up by the unfortunate Abbé Debaize.

In our conversation we naturally spoke about the treatment of natives. The three captains showed a strongly military tendency in their ideas. They put implicit faith in their guns, holding it as an axiom that every native who meets them is thirsting for their blood, and only waiting to get them without their fire-arms to do some bloody deed. Consequently not one of them will ever venture half-a-dozen steps from the door without his favourite weapon. My views about the management of the porters were much derided, and treated as foolish; but I could quote the good old saying, "By their fruits shall ye know them," and could afford to let them laugh when I thought of the comparative results of the two methods.

Mr. Hore, who is a great believer in the virtues of resolutions, thought that when so many travellers of such varied experience were gathered together, it would be greatly to the enlightenment of the benighted people at home if we all came to resolutions with regard to some of the great African problems, and he

laboured hard to convince us of the necessity and importance of expressing our unanimous opinion. The idea was good; but unfortunately we could find no question on which we were mutually agreed. So we had to give up the notion of setting everybody right about Africa.

While here I was impressed with the fact that as yet the agents of the Belgian station "for the assistance of travellers" were far from being in a position to carry out their benevolent design. This, however, gave me a chance of enjoying the gratification of assisting *them* to a variety of useful articles which I could still afford to give away, though of course they had to be sent back from Iendwe by Mr. Hore.

After spending a pleasant day we once more made our salaams to the elephant as the sun set and a threatening cloud rose above the horizon. In another hour we were back at our tents to spend the evening in the jolly society of Carter.

In the evening of the following day we bade adieu to our genial friend, whose face we saw for the last time, and resumed our voyage.

The night was clear, with no wind and no moonlight. We pulled but a short distance through the tranquil waters, and then entered a beautiful narrow inlet, like a miniature Scandinavian fjord, where we anchored till the moon rose. The boatmen landed and built a fire. We remained on board and slept as best we might without shelter of any kind and under the vault of heaven, to be awakened now and then by

the distant roaring of a lion, the weird grunting of the disturbed hippos, the hooting of owls, or barking of monkeys in the neighbouring forests; while sometimes the eye would be attracted by the light of the camp-fires, about which dark figures moved, and whose ruddy glare intensified the outer gloom, harmonizing well with our romantic surroundings. And thus on our hard boards we lay, and in a doze dreamed of fairy things, till, as the moon rose above the horizon, the deep voice of our Captain sounded with startling effect, rousing every one to action. Into the boat the men came tumbling, cold and shivering. The moorings of the "Calabash" were cast off, and then, under the cold light of the moon, we pulled stealthily and cautiously out of our pretty little inlet, and with our disordered clothes in which we had lain, our uncombed hair, and unwashed faces, we looked like veritable buccaneers, such as we read of in days of old, starting with a villanous crew on a plundering excursion. Fairly clear of the shore, and in deep water, the Wajiji gave way with a will, breaking the deep silence with the splash, splash of their oars, and the accompanying recitative and song. This was the delicious and enjoyable part of the twenty-four hours. As morning broke we indulged in a wash and a frugal meal of cold boiled beans and sugarless tea, to continue our course under a burning sun. Such is a sample of our daily stages.

After leaving Karema we found that the wet

season was pretty well over. During its continuance the prevalent winds are from the N., N.E., and E. Towards the end the weather becomes more irregular and squally, and on the whole this is the most dangerous time of the year. Then with the commencement of the dry season the wind veers round and blows generally from the south. In the evening, however, and early in the morning there are usually light breezes off shore. These we were now taking advantage of in our progress southward, being compelled to lie by during the day. In the dry season the winds being southerly, develope extremely dangerous swells, which usually last for several days after a squall or stiff breeze.

During our canoe voyage I was very much amused at Mr. Hore and his crew. The former having been brought up all his life in the merchant service, and accustomed to strict discipline as second officer on board a P. and O. steamer, could not for the world bring himself to remember that he had not a trained crew at his command, and entirely ignored the fact that from their earliest youth they had been accustomed to the rudest methods, each one doing just as he thought best without respect to the orders of the nominal captain. The consequence of this was that when he shouted out an order he expected it to be executed with all the dexterity, promptitude, and care of a trained crew; whereas they, not understanding the necessity of hurry or care, or each man trusting to his neighbour, either did things leisurely and

clumsily, or did not move at all. The Captain's strict sense of discipline being thus outraged, he would fly into a regular sailor's passion, or sink down with a pathetic "Good gracious!" as if he expected the old tub forthwith to go to the bottom of the lake. Then he would yell out bad Kiswahili to the Wajiji, who know it imperfectly, and abuse them if they did not understand him. Stupefied by this excitement, the significance of which they could not comprehend, they would sit and stare at him helplessly. At last, letting go the helm, he would rush across the seats to perform the simple operation himself, and then return to bewail the awkwardness of his crew. These storms, however, though frequent, were always evanescent, and arose entirely from his many years of service in ships where a badly or slowly executed order might have brought ruin to the vessel. He hardly made sufficient allowance for the totally different upbringing of the Wajiji. But they soon came to understand him, and before they returned from their cruise they had become vastly more sailorlike.

Owing to the change of the winds to the S.E., S., or S.W., our progress after leaving Karema was much slower, and required constant paddling, as our sails were now useless.

On the third day from Karema we passed the picturesque Cape of Mpimbwe. From this place southward the scenery begins to assume a new character concurrently with a change in the geological formation. From Kungwe to Mpimbwe the rocks are

metamorphic, greywackes, schists, and gneiss, which during denudation have assumed a uniform monotonous surface most wearisome to the eye. Seldom is the outline broken by a valley or glen. No picturesque precipice, or bold irregular-shaped hill, adds variety to the landscape. The usual feature is a steep rise of 200 or 300 feet from the edge of the lake, forming a step, and then further inland a higher range of rounded mountains.

South of Mpimbwe the metamorphic rocks give way to a felspathic formation, which at a very early date seems to have risen as a great boss of igneous rock through the overlying strata. Being much jointed, and very decomposable, it has become denuded into most irregular and fantastic surfaces, which are covered with immense boulders and blocks, lying about as if carelessly thrown together in a heap, without order of any kind. Here they stood like giant pillars, there they lay balanced on a small point, forming veritable rocking-stones. Sometimes they seemed like the courses of an immense building: anon they formed pretty little sheltering caves, from which numerous tender ferns peeped forth secure from the ravages of the storm. Between the blocks grew shrubs, and over their tops crawled snake-like creepers.

These characteristic features have given some of our travellers an opportunity of airing their classical knowledge, by allusions to Vulcan and the Cyclops, and of getting wondrously eloquent upon the subject of great convulsions hurling up huge

rock masses, and producing indescribable chaos in the crust of the earth. To me they revealed none of these things. I saw in them only the slow hand of time, working incessantly through the revolving years to produce all these magnificent results, by the dashing rain, the wind, and rapid radiation. The decomposable nature of these felspathic rocks explains also the occurrence of the numerous small islands which here line the coast, and add variety to the scene. Doubtless they once formed capes and headlands, but gradually some weak part has been washed away till they have been entirely surrounded by water.

On the 2nd of April, after visiting the bay of Karindo, or Chakuolo, with its numerous villages and well-cultivated soil, we passed the islands of Makakomo. On the 4th we spent the day on the charming island of Msamba, where the native Wajiji live in great comfort, possessed of numerous goats, fowls, and pigeons, and raising a large amount of honey. Many of the trees there were very large. At night, after we had fallen asleep, we were aroused by two large canoes suddenly appearing round a point, and dashing into where we were with a loud song. We were not long in being apprised of the fact that they had the flesh of a hippopotamus on board in a decomposed state; and till we departed we kept our fingers at our respective noses.

On the afternoon of the 5th we neared the picturesque island of Polungu, which rises like the end of a cylinder out of the water. It is circular in

shape, and has unbroken precipices 200 feet high all round, with vegetation everywhere clinging to the sides of the rocks. As we were pulling quietly in, all at once we were startled by the abrupt outstarting of two huge canoes from a deep and narrow inlet. They were crowded with men, and spears and bows were very conspicuous. The moment they saw us they gave a shout, raised a resonant song, and then, as one man, dashed their paddles energetically into the water, and directed their course towards us. Now if we had been of the bellicose disposition of the Karema people, we would doubtless have seized our guns, under the impression that an attack was meant, and without waiting for further parley, would have sent some bullets whizzing among them. But not believing in such a course, we simply looked to see where our guns were, and then with some feeling of apprehension waited to see what was the meaning of this demonstration. When they got near us they halted, and seemed to consult each other what they should do. Some were observed pointing in our direction, and a considerable stir was noticeable. Another shout concluded their deliberations, and once more they dashed towards us with their wild chorus. This all looked very warlike, and we glanced at each other in some dismay. But our anxieties were speedily removed; for as the canoes approached, our men yelled out with delight that they were Wajiji returning home from a trading expedition. So they indeed proved to be.

The greeting interchanged between our Wajiji boatmen and the strangers was most pleasant and touching. They all stood up with hands closed, and held out in the manner of supplication; then with solemn faces they bent slightly to one side, and repeated in a low key the salutation, "Wakhé, wakhé?" (How art thou?), finishing off with clapping the hands once or twice. As each one in our boat was thus saluted personally by all those in the other boats simultaneously, it was some time before they had finished.

This greeting over, the spokesman of our party, as being latest from Kawelè, related to them the most recent news. The tidings of the chief's death was received with many expressions of sorrow and regret. Then he told of the difficulty about getting a successor, the troubles of Mr. Hore with the Arabs, my arrival at Ujiji, and concluded a long story by reciting the incidents of their voyage, and referring to the astonishing speed with which they had come down the lake—a fact which elicited remarks of wonder, as such quick work had never before been heard of there.

Our spokesman having got through his story, the other party told theirs;—how they had left Ujiji many months ago, crossed to the west side of the lake, and continued along the coast, trading with the different chiefs; the luck they had had, and how that they had passed me while at Mpala. (I remembered having seen their canoes at the time.)

Then to my pleasure and relief they told how they had visited Iendwe, and found my men all well, and brought Chuma's salaams to me. They had just crossed from Iendwe the previous night. Having finished talking, they once more greeted each other most ceremoniously, and forthwith resumed their voyage.

The Iendwe news was most delightful to me, as I had quite made up my mind to find my party gone, and I was continually debating the question whether I should go straight to the coast with my ten men, or return to Ujiji with Mr. Hore. All my perplexity was now dissipated.

After spending the night in a charming little nook with great overhanging rocks and tangled creepers, we prepared as usual with the rise of the moon to continue our voyage south; but before we got any distance a heavy breeze and swell compelled us to put back. We then determined that instead of rounding the southern end of the lake, we should strike straight across for Iendwe, if the weather was favourable in the evening.

While dozing away the day under the shadow of the rocks, with the pleasant ripple of the water at our feet, enjoying the beautiful view, the clear sky, the transparent tropical atmosphere and the cool lake breeze, we were once more surprised by an interesting incident. Anticipating no evil while located on an island where we had found only an old man and a woman, we were all lying on shore, with the exception of Mr. Hore,

and without weapons. Most of the men were asleep, and all slumbering in the sense of peaceful security, when we were suddenly awakened by a cry from Mr. Hore. Looking up, we were astonished by the sight of a large band of natives descending the rocks, fully armed with bows and spears, and proceeding with a deliberate step, which indicated some decided object in view. Before we could fairly realize the position we found ourselves surrounded and cut off from the boat; and on every commanding rock stood warriors, ready at a moment's notice to launch their arrows or spears.

It required but a glance to take in the situation. There was no mistaking the meaning of the position they had taken up, or the fact that we were quite in their power. An attempt to gain the boat would have meant our instant destruction. Their dress and arms showed that they were Wafipa; and we knew that there was no more peaceable race in Central Africa. We concluded therefore that they must have had some very potent reason for assuming their present threatening attitude; and as our consciences were clear, we saw that there was some mistake which only required to be cleared up. We showed not the slightest alarm or astonishment, but addressed them with words of welcome and smiling faces, as if they had come on a friendly visit. Mr. Hore sat up in the boat and began lighting his pipe, while I went forward among the warriors, and examined their arms with curiosity.

The Wafipa looked intensely astonished at this reception, having expected something far different. At last they informed us on what business they had come. A slave had been stolen from one of their villages, and they had been told that the white men had done it, and they had come to fight us and get him back. They had also been informed that we intended taking all their slaves from them. At this we laughed, and said that if they found their slave with us they would be quite at liberty to fight. Mr. Hore then invited the leader to enter the boat and look for himself. This he was rather afraid to do, but at last satisfied himself that no slave was there. Mr. Hore improved the occasion by enlightening them as to who the white men were and what was their mission in Africa, thereafter giving them a small present of cloth, with which they departed quite delighted. This is another instance of the really peaceable intentions of most native tribes; a little reasoning goes a very long way, and a show of confidence always wins a reciprocal feeling.

In the evening we commenced the difficult task of crossing the lake for the second time. With a smooth sea and a favourable breeze we sped pleasantly onward. Mr. Hore as usual stuck steadily to the helm. This he would never trust in any person's hands. Having nothing to do, I stretched myself out on a plank and fell asleep.

Early in the morning I awoke to see through the haze the outlines of the Iendwe mountains. The

wind had not been very favourable during the night, and the men had to paddle without a minute's rest. The sky now threatened a storm, and made us anxious to get into shelter as soon as possible. Otherwise we should be in danger of being driven back to the side we had left. So the weary workers were once more urged on. After daybreak the threatened storm became a reality, and in a few minutes the lake was a scene of raging dangerous waves. We found also with daylight that we were still a considerable distance from the shore, and so with sails closely reefed and the jaded men pulling with all their strength, we faced the storm and toiled resolutely on, determined not to be beaten without a hard struggle. Slowly but surely we approached the land, and finally, after a few hours' dangerous tacking with our old rotten craft, we got into shelter. Everything after that was pleasant sailing, and soon we made the mouth of the Lofu, or rather the creek into which the Lofu falls.

We then arranged a grand surprise for my men. We were to have Mr. Hore's mission flag at the stern, a fine new Union Jack at the foremast, and my own familiar old and battered flag flying at the top of the mainmast. We also arranged for salutes with our guns, and for hurrahs and shouts, till every corner of the valley should re-echo with the jubilant sounds.

Pleased with the anticipated episode, we paddled up the charming zigzag course of the creek, with its steep bordering hills.

Greatly to our chagrin, however, when we had just got fairly into the valley and the expansion of the creek, we found an impassable barrier of tingi-tingi, or floating vegetation. In vain we tried to find a passage. Everywhere tall grass and shaking ground. This was all the more remarkable, considering that when I was here before no suq'ù barrier existed; and thus within five months an expanse a mile broad and long had formed, of sufficient strength to allow us to walk about on it with impunity.

Finding our attempts in vain, I set off with Makatubu for the camp. After a most disagreeable floundering for three hours, through ditches, swamps, drains, streams, &c., we reached Kapufi's village, one mass of filthy mud from crown to toe.

No one had the slightest suspicion of my approach; but when we were once descried, the news spread like wildfire. As if by magic I was surrounded by a mob of men perfectly wild with joy. They yelled and danced like mad beings, and shook me by the hand till my arms ached in their sockets. They even hung about me. On all sides they ran about, firing their guns in the most reckless fashion. Many of the more excitable blubbered like children, and I felt as if it would be a relief to myself to do the same, as I involuntarily took out my handkerchief and dried my eyes. Such a scene of tumultuous joy could only be seen in Africa.

On getting matters somewhat quieted, I despatched several men to bring on my goods, as I

expected Mr. Hore to return with them. After getting washed, dressed, and otherwise refreshed, I turned out to see how matters looked. Greatly to my delight, I found that no man had deserted, and no one had died, though they had gone through a good deal of fever during the rainy season. The camp formed a circle of neat houses, built in the coast fashion, surrounding the store-house, where my goods were located, and where the headmen dwelt as a guard. Everything was surprisingly clean, and the circle gave evidence of being swept up each day. In expectation of my return, a cool, commodious hut had been built for me, under the shade of a tamarind-tree. The goods were all found to be safe. Chuma had acted with much care and moderation, in spite of his somewhat extravagant character. The only fault I had to find was that he had carefully selected all the bales with fine cloths in them, and being of a very gallant nature, with a soft side towards the female sex, he had been somewhat lavish in his gifts to such Iendwe damsels as had the good fortune to attract his attention. I found that he had earned great popularity among the natives; and immensely to my amusement, I heard myself described as "Chuma's white man," as if I was some curiosity, which that illustrious gentleman was exhibiting for the benefit of the benighted natives of the interior.

All honour, however, to Chuma and his comrades, who thus through the weary months stuck faithfully to their posts while there remained a hope of my

return—who with everything in their power, never once presumed to put forth their hands unlawfully to take what was not theirs, but guarded everything with watchful honesty.

Late in the evening the men returned, with all my goods; but Mr. Hore, with his strong scruples against leaving his beloved canoe, did not accompany them. I felt feverish and suffocated during the night; so marked was the difference between the cool breezy atmosphere of the lake and the air of the stifling valley of Iendwe. I remained in the same depressing condition all the following day. About noon, Mr. Hore arrived, considerably exhausted with the unusually hard work of marching through swamps and marshes.

In the evening Chuma appeared, with the information that the men had vowed to dance all night when I returned, in honour of the occasion. He wanted to know whether I had any objection. Of course I could not refuse my sanction; and accordingly when the sun set, and the moon began to shed its light over the Iendwe mountains, they commenced one of those extraordinary orgies which to a European only suggest ideas about the lower regions. And so through the livelong night they howled and sang, clapped hands, and generally threw themselves about, while the drums rolled out their volume of sound, and the zomiri screeched.

In the morning, finding the dancing still going, I could not do less than show my face. I found a

few still doing their best to keep on their legs, but the majority had sunk down exhausted on the battle-field, and now lay sleeping in various attitudes and places. The most painful spectacle was the zomiri player, who, while he blew with such vigour as remained in him, went through a series of distressful contortions, and wriggled about in a manner suggestive of convulsions or colic.

When I appeared on the scene a shout was raised, and every one sprang to his feet. As if they had thoroughly rested, they formed a ring round me, and with a chorus and grand breakdown they finished the proceedings.

I now learned a piece of news, which filled me with intense chagrin and disappointment. I had all along intended to return straight east from Iendwe, through Usafa, Ubena, and the Rufiji valley to Kilwa. It now appeared that this was quite impossible, owing to the resumption of the war between Mamle of the Wahehe and Merere of the Wasango, of which I have already spoken in chapter vi., vol. i., when treating of the rise and fall of the Wahehe power. To pass through an African district during war is an utter impossibility, unless you are prepared to join one of the parties. If I had attempted it in this case, the moment I set foot in Merere's territory I would have been compelled to stay, and probably to fight along with him. If he should be victorious, I might then get away. But if the contrary, then all thought of getting to the coast would

have to be abandoned. We would be compelled to retreat with him, and go where he went; and if we fell into the hands of the opposite party, there would be but little hope for us.

However, there was very small chance of even getting into the country of either belligerent, as it is considered a point of honour among native chiefs never to let traders, travellers, &c., enter a country when there is war.

My next idea was, if possible, to pass round the seat of war, and then strike straight east; for I was determined, if possible, to take a new route to the coast, and not merely to follow the well-known road by Unyanyembe. This also was shown to be impossible, as the robber-chief Nyungu, the murderer of Penrose, had devastated the entire country between Unyanyembe and Usango, and now held possession of it with his lawless bands. Clearly we would have to fight him if we tried that route. Under these circumstances, there was nothing for it but to abandon my cherished plans, and make with all speed through Fipa to Unyanyembe.

On the 11th April, therefore, I commenced my preparations, rearranged my boxes, bales, &c., and on the following day distributed them to the men, so that there might be no delay in the morning when we started. While so doing, we enjoyed the novel sensation of a slight earthquake shock, proceeding from east to west.

CHAPTER V.

FROM IENDWE TO THE COAST.

On the 13th of April, as a faint indication of the approaching day appeared, I was awakened with certain familiar sounds, which on this occasion filled me with feelings of the deepest pleasure. Toot, toot, in long drawn or short notes, went the panpipes of the head kiringosi, followed by the shrill, screeching shrieks of the zomiri, and then the thundering notes of the drum, all joining at last in a grand medley of sounds, in which a hundred voices took part, as the porters rushed about, picking up their loads or tying up their mats.

In half an hour we were ready, and then bidding our excellent friend Mr. Hore good-bye, we commenced our return march to the coast. The men, weary of their long journey and their tedious stay at Iendwe, required no incentive to induce them to push on with energy. They were returning to home and the dear delights of Zanzibar.

We ascended the mountains somewhat to the west

of our former route, to get the advantage of the more gentle ascent. The stamina of the men was tried to the utmost in pushing up the steep mountains after their enervating lazy life down in the feverish hollow.

In three hours we reached the top, and thoroughly enjoyed the much cooler atmosphere that there obtains. At noon we camped at Mkombola's. In the evening I was rather interested by the appearance of a young Arab woman, of most prepossessing beauty and with splendid eyes, who, in a voice that did justice to her personal appearance, commenced a story of wrong and oppression, which made me feel like a knight-errant of old, and almost vow to punish the offender and take the unhappy damsel under my care. According to her story, she was the daughter of a pure Arab of Unyanyembe, from which she had been carried off by another Arab and taken to Iendwe, where she had been kept virtually a prisoner. She had not been made his wife, although she had had two children by him, both of whom were now dead, till at last, hearing of my arrival and subsequent departure, and of my kindness and respect for women, she had resolved to run away and throw herself under my protection till she got to Unyanyembe. Whereupon she finished up with tears, and in a most beseeching tone asked me to take her with me.

I of course was touched by this sight of beauty in distress, and almost promised all that she wanted. But then second thoughts arose. How could we get

along with an unattached female in the caravan? I could not solve the difficulty as in the case at Lake Nyassa, by marrying her to one of my men, seeing she was an Arab. What, then, was to be done? As all sorts of complications would evidently arise from having her with us, I at last steeled my heart against the proposal, and determined to respect the proprieties, even though it was in Central Africa. I, however, had not the hardness to tell her so myself. I therefore bolted into my tent, and then sent word that I could not take her with us.

During the night I caught a chill, which for several days stopped all perspiration. In a hot country like tropical Africa, this is one of the most agonizing things that can be imagined. I felt when on the march as if I was bursting, and the intense sensation of weariness and exhaustion is altogether indescribable.

Crossing the flat, sandy, and scrub-covered plateau of Mkombola and Setchè, we reached Pambetè in two marches. We found the village almost totally deserted, and in ruins. The only person to be seen was the old chief, who was apparently unable to drag himself away from the associations of the place. Probably there is hardly a vestige of Pambetè left by this time, and the next traveller who visits the spot will find a jungle or a field of corn where once the thriving village stood.

We next passed round the south end of the lake. Skirting its rocky shores, and crossing the Holocheche

from Sombè's, we struck more inland, and left the beautiful Tanganyika behind us.

On the 18th, after some stiff and troublesome climbing by a very rocky pathway, we reached the Kilambo river. We found it to be about six yards broad, and unfordable, a fact which caused us some trouble in getting all our goods safely across. The country we found to be still Ulungu. At the time of the year at which I write the villages were all nearly deserted, as the grain (ulizè), on which they principally depend, was now ripening, and all the people were out living in the forests looking after it, to prevent its spoliation by the antelopes and buffaloes, which abound. For safety's sake they build small circular huts upon very high poles, which they reach by means of a notched stick. They are thus rendered safe from attacks of wild beasts or robbers; and as they can light a fire beneath the hut, they are to some extent protected from mosquitoes by the smoke. In these airy and picturesque huts the Walungu live during the harvest season, and when they are preparing the ground for sowing.

Lions are not unfrequently heard roaring in this part of the country. I was very much amused to observe the effect the sound had upon one occasion. It was early in the morning, and we were moving along in a loose straggling line through a forest with an undergrowth of tall grass. Suddenly, from within thirty yards of our path, rose a savage roar from a lion. It seemed to shake the ground, and made every man stand for

a moment with bated breath. Then the porters all closed up as if by magic; not a man uttered a sound, or allowed his footfall to be heard. By common consent they went swiftly and silently onward; nor did they pull up till several miles had been placed between them and the dreaded animal. As for myself, I was also at first awestruck at the fearful bellow, but quickly recovering myself, I dashed like a madman into the long grass, anxious to see the animal, and if possible get a shot. The probability is that it would have been upon me before I knew where it was. But fortunately my headmen came rushing after, to stop my foolish proceeding, and they made sufficient noise to frighten away even the lion. Thus, perforce, I had to resume my humdrum march. I consoled myself by the amusement of picturing how I would have shot it. Of course we would first have stood and eyed each other; then I should have fired, but without fatal effect. The lion would, with a dreadful roar, have sprung at me, but receiving my last bullet in its brain, would have fallen on the top of me, dead! And so on.

Leaving Kilambo, we continued our journey over a pleasantly wooded undulating country, free to a large extent from the numerous huge boulders and projecting rocks, the creepers and the bushes, which had hitherto considerably retarded our progress.

At Msomvia we found the chief wearing a grass band round his forehead, which we were told is the Walungu custom when their fathers are killed

in battle. The weather remained still very unsettled, though the worst of the rainy season was over. Showers and thunderstorms, though of short duration, were almost of daily occurrence.

On the 20th we crossed the Kawa, and the marshy plain through which its two feeders flow. This brought us to the last Ulúgu villages towards the north. As the surrounding country was extremely marshy and filthy, and rain threatened, the men were anxious to camp inside a village. Being on the frontier, the villages were strongly fortified and the people very suspicious. Everywhere else, however, we had been received inside the stockade, and not expecting a different reception here the caravan closed up, and with flag flying, band playing, and men singing, we marched bravely up to the gates. These we found shut. For a few minutes the band played away, as if they expected that the music would be an "open sesamë." But alas! it had no effect; the people would not let us in. We next proceeded, in the same pompous style, to a village a short distance off, with the same result.

I now wanted to camp outside, and protested against going about begging for entrance in this ludicrous manner; but the men, not inclined to lie out on the wet mud, wanted to make another attempt. So once more they set off, with banners flying and music playing, to a third village, but with no better speed. The men, now thoroughly disgusted and angry, wanted to give the inhospitable people a

sharp lesson, and let them feel their power. Of course I could not listen to such a proposition for a moment, as the natives had quite a right to shut us out if they pleased. We therefore prepared to camp outside; but happily in a few moments the chief of the village appeared, and most humbly asked us to come back into their village, as they had been under a mistake regarding us. To this we graciously assented, as the rain was now descending in torrents.

The district of Mtengululu we found to be 4500 feet above the sea. Occupying a very fertile well-watered plain, it is the most populous place in Ulungu. We found many Wanyamwesi here.

Next day, ascending to the top of a ridge, we had a fine view of the valley of the Ilimba, the principal tributary of the Kawa, which flows south, and then west. It formed a large expanse of grassy plain dotted with trees, singly or in clumps, rising gradually east and west to the bottom of the bordering hills, whose dark wooded sides present every variety of colour and outline—here a gently rolling ridge, there a cone or a dome, now rising rugged and precipitous, then sloping gradually up to 1000 feet above the plain. Numerous herds of game lent animation to the scene.

Passing to the head of this charming valley we camped at Ilimba, the first village in Fipa. We notice at once a considerable difference in the shape and size of the houses.

The circular walls are twice the height of those of

Ulungu, and frequently they are built as if two were stuck together. Internally they are double—the outer circle being used for grinding corn, cooking, and other domestic occupations, while the inner apartment is reserved as a store and sleeping apartment. The Wafipa are not distinguishable from the Walungu, except by several cuts on each temple, and the custom of knocking out the lower incisors.

We were still rising in altitude, and at Ilimba we found the temperature very low at 5000 feet.

Leaving Ilimba we crossed the valley, and the hills which bound it to the east. We now found ourselves, very much to our surprise, in another magnificent valley, running parallel with the Ilimba, and through which the river Kilambo flows south before bending suddenly round westwards to the lake. The eastern side of this fine valley is bounded by the imposing range of the Lambalamfipa mountains, which rise to a height of 8000 to 9000 feet.

Crossing two minor streams, which join the Kilambo, we reached the river itself after seven hours' march. Two hours more brought us to the village of Inyamwanga, so named by a colony of people from Inyamwanga, south of Fipa. We now found ourselves at a height of 6000 feet, and the weather extremely cold.

The general appearance of the Kilambo valley is that of a fine Scotch Highland scene. The plain is almost treeless, and covered with a tawny yellow grass, like a bleak moorland, though somewhat more productive and fertile.

From Inyamwanga messengers were despatched to Makapufi, to inform the head chief of Fipa of our arrival. Late in the evening they returned, bringing with them some milk, which I drank with great relish.

Pushing onward we passed a low ridge covered with scrubby trees, and entered another great offshoot of the Kilambo valley. Crossing that river for the third time, we descried at the foot of the mountains the town of the great Kapufi. Plunging and sliding through the tar-like mire we at last approached the outskirts of the town. Here we called a halt, while men were once more despatched to intimate our proximity. In a short time a number of Mlima Arabs, headed by one nicknamed Ngombè-Sasè, appeared, and after the usual salutations and inquiries informed us that we were to camp outside the town. The character of Wangwana, they hinted, was too well known, and if the men got inside they would produce no end of domestic troubles by their intrigues with the women. This I could not deny. I therefore consented to camp outside at a respectable distance, and agreed that no one should be allowed to enter after dark. I soon found, however, that there was no restriction put upon errant females coming out of the town to my camp at night, greatly to the demoralization of my too gallant followers.

In the afternoon I sent Kapufi my present, with which he was greatly pleased. In a burst of enthusiasm he rushed off, and with his own royal hands

laid violent hold of various fowls, eggs, and other good things for our benefit. Ngombè-Sasè, it appeared, acts as prime-minister and general adviser to Kapufi. He has him, I presume, very much under his thumb, and doubtless contrives to make a very good business out of his office.

It proved to be dreadfully cold at Makapufi. Throughout the night a bitter wind swept down from the mountains with freezing fury, so that I found it quite impossible to warm myself, though I heaped more clothes on myself than ever I did in Scotland in the depth of winter. How the men survived it in their grass huts, and their thin clothing, I cannot comprehend. A considerable number were seized with dysentery, influenza, and hæmorrhage, but by care and judicious treatment they were all pulled through without any fatal results.

Early in the morning, after breakfast, a royal messenger arrived, with the intelligence that his master was ready to give me an audience. Proceeding to the town, with my usual guard for state occasions, we passed a fine herd of cattle, which had a very markedly English appearance. Entering the town by the strongly fortified gate, we found ourselves in a perfect labyrinth of inner bomas, or palisaded quarters. Crossing over a variety of dunghills and filthy cesspools, which indicated that the cattle passed the night within the royal precincts, we reached Kapufi's palace. It differed from the other houses only in size.

Ushered into the audience-chamber, I found myself in total darkness, except for the little light by the doorway. After some groping I found my camp-stool, which always accompanied me on such occasions. Sitting down, I tried to make out my surroundings, in the expectation of Kapufi's speedy arrival. I was, however, informed that he was really present. Peering steadily into the darkness, I at last became aware of a naked body, of very stout proportions, but somewhat spectral and indistinct. I made the usual Swahili salutation of "Yambo?" (how do you do?), and was yamboed in return by a voice beyond the spectral figure. Then from the darkness issued a human being, of pleasant aspect, middle-aged, but grey-haired, and dressed simply in an Amerikani loin-cloth, with grass strings round his legs. Having thus shown himself, he retired once more behind the indistinct individual.

Getting accustomed to the dark room, I at last was able to make out that Kapufi was sitting on a stool, with a monstrously fat woman in front of him, holding on her knees a large pot of pombe, forming, in fact, the indistinct figure which had puzzled me so much at first. At one side sat another very fat woman, also his wife, whom I "unearthed" with difficulty, owing to her colour being the same as the wall. She held a hollow tube, through which Kapufi ever and anon imbibed refreshing draughts of pombe, on which he lives almost exclusively. In this position Kapufi passes the entire day, and when he has no

public business and has drunk to repletion, he enjoys a pleasant siesta, with his legs over the lap of the pombe holder, and supported by the soft piece of animated plumpness who holds the pombe tube at his side. There is really more reason for an African chief having fat wives than civilized people are apt to imagine. They have not yet developed the art of *making* pleasant seats and cushions, so they *grow* them. Of course the two ladies, his wives, are now and then relieved in their arduous duties by other members of the harem.

The room was decorated with bows and spears, and no end of dawas, or medicines. Hung up against the wall was a series of pipes, which served the purpose of announcing to the outer world that Kapufi eats, or sleeps, or goes forth to walk.

During this interview I presented a gaudy dressing-gown from Mr. Hore, and read a letter from that gentleman, in which he told about the white men stationed at Ujiji, who they were, and what they came there for.

Leaving the chief, we proceeded to pay our respects to Kapufi's principal wives, his mother, and sisters. We found them all to be delightfully plump and fat, wonderfully light of colour, well oiled, with head shaved, and lower incisors knocked out, but withal the most motherly and pleasant-looking ladies I had seen anywhere in Africa. It was a perfect treat to look on such an interesting picture of native domestic life. There were no signs of idleness; some were weaving

native cloth; some in groups were pounding food; others were cooking, or preparing skins for wearing. Everywhere was merriment and lighthearted laughter, and, upon the whole, cleanliness, except in the matter of the accumulated dung of a score of years.

Curiously, as in the case of Karagwe, fatness is considered a great point of beauty in these queenly personages. To keep them up to the proper weight they are fed almost entirely upon milk; indeed, it is for their sole use that Kapufi keeps his cows. This chief has four principal wives, and a hundred of a lower grade. In other respects, however, court etiquette is rather hard upon him. Thus he is not allowed to wear anything but a single loin-cloth of the plainest cotton. His only personal ornaments consist of a few strings of grass tied round his legs. He is expected to live upon pombe, but if he has to vary his diet he has to take goat's flesh immediately on the animal being killed. He is never allowed to see a tusk of ivory, though sometimes in the shape of ornaments the precious article meets his eye.

The Wafipa differ very much in appearance. Thick lips are common, but as a rule the shape of the head is above the average negro type. In colour they vary from a light brown to a sooty black. The dress of the poor is a simple loin-cloth of native-made cotton cloth; but amongst the fashionable a flowing piece of white cotton is added, tied simply round the neck, and falling loosely over the back.

They are more of a purely agricultural race than any other tribe I have seen. To the cultivation of their fields they devote themselves entirely. They never engage in war, though they will, of course, defend themselves; and they seldom hunt the numerous herds of game. Their villages and immediate surroundings are always indescribably filthy. It is said that the Wafipa never make slaves, or sell them to traders, but on the contrary, entice them away from passing caravans. If they once succeed in getting inside of Kapufi's town, they are considered to be free.

The only punishments allowed for offences are flogging, fining, and imprisonment. Adultery is punished by fines; murder by the culprit being tied for a certain period to a post, and all his goods confiscated.

On occasions of great drought all the chiefs and big people assemble near Tanganyika, sacrifice sheep, goats, and fowls, and pray to the spirit to send rain. They add confidently that it then always comes.

They have a curious respect for the sheep, and consider it quite a crime to tie it with a rope. Kapufi's consent must always be obtained before one can be killed.

When a sultan of Fipa dies, a large pit is made, where a dozen or so of cattle are killed and placed. On the top of these the dead chief is laid and covered in.

Kapufi is looked up to as being not only nominally

but practically the leader and chief of the people throughout the whole of Fipa. He is greatly respected and reverenced. He wields an actual power of government, so that his orders are respected everywhere.

So much for Kapufi and his people.

Finding that that curious lake called Hikwa, or Likwa, which had been so long heard of and never seen, was within a day's journey of Makapufi, I resolved to visit it, and try if possible to clear away the mists of uncertainty respecting its position, extent, and character—for like a will-o'-the-wisp it had danced about this region of Africa for a long time, assuming innumerable positions and forms according to the tunes whistled by the magic pipe of geographers and travellers.

" I accordingly got a guide, and on the third day after my arrival I started with twelve of my men. Our guide proved to be no less a personage than Kapufi's son and heir-apparent—a blear-eyed, prematurely-aged individual, who by his dissipated countenance showed that he never left the pombe-pot far from him, and accordingly we found among his heterogeneous retinue that he had two men carrying large calabashes of that turbid beverage. He was dressed in all the glaring glories of the dressing-gown which Mr. Hore had presented to his father.

Crossing over the spur of hills immediately east of our camp, we entered a charming tract of country. Picturesque mountains diversified the landscape on

all sides, forming peaks, cones, pyramids, domes, or ranges, partially wooded, and separated by long stretches of comparatively level grassy valleys.

After surmounting the first range we entered the drainage basin of the lake, crossing a large stream called the Kisa, which flows nearly north till it joins a second stream, called the Mkafu, and then bends round east and south into the lake. Scaling a second range we passed a fine village, with large herds of goats, sheep, &c., and much cultivated ground, and reached a second stream, also flowing north to the Mkafu. The water in these streams was so cold that in crossing them we were perfectly agonized and benumbed.

After losing our way and wandering about for some time, we finally met at a small village and camped. Kapufi's son was inclined to be very hospitable, and offered me some of his pombe. On my declining it he seemed very much concerned, and wondered what a big chief like myself could live on. At last a bright idea struck him, and calling on one of his followers, he ordered him to gather as many eggs as he could lay hands on. On my asking if any milk could be got, a dozen goats were immediately seized, and vigorous but ineffectual attempts made to draw forth the desired liquid.

Next morning, despite the freezing cold and the miserable drenching dew which loaded the grass, we were off with the rising of the sun. Making a long détour towards the south through grassy undu-

lations dotted with acacias and euphorbias, we reached the top of a range of grassy mountains, where another long stretch of rolling country and another range of hills lay before us. We had expected to find the lake quite close at hand, but now it seemed that it would require all our energies to reach it and return. So each one strained his powers to the utmost.

After a two hours' tramp at a killing pace, we were gladdened by a peep, through a gap in the mountains, of a strip of glimmering water, backed in the far distance by a high range of mountains, seen indistinctly through a bluish haze. This made us throw our caps in the air and hurry on. At last we reached the top of the last range of mountains, and below us stretched the lake in supreme beauty. The part we had reached was near its northern termination, where the river Mkafu enters it, and where it is encircled by a broad strip of yellowish green marshy plain, with here and there dark patches of forest. Beyond the plain rose the most rugged of mountains, in almost sheer precipices, from 4000 to 5000 feet above the level of the water, forbidding all ingress or egress except at one or two points.

The point where we halted was upwards of 7000 feet above the sea, and from the fact that the river Mkafu, which flows into the lake, is only about 3000 feet above sea level, at a distance of sixty miles north, I infer that Lake Hikwa is not far from being on a level with Tanganyika. So steeply do the mountains descend, that from the place where we halted we could

almost throw stones into the lake; only we lost sight of them before they reached the ground. The general altitude of the surrounding ranges must be quite 8000 to 9000 feet, and they extend in an entirely unbroken line all round.

At the north end I calculate the breadth of the lake at about twelve miles. Further south the breadth varies from fifteen to twenty miles. Longitudinally it lies N.N.E. and S.S.W. Its length, from native report, and from my proximity to it in passing between Nyassa and Tanganyika, I conclude to be certainly not less than sixty miles, probably seventy. Between the mountains and the shores there lies a narrow dark green strip of smooth land, apparently representing a once higher level. On this there are many villages, and the ground is highly cultivated. At the north end, as I have already stated, this strip broadens out into a marshy expanse, formed doubtless by the detritus of the river Mkafu.

The natives were unanimous in the assertion that no river flows out of the lake. One or two of them said they had been all round it. That such is really the case cannot for a moment be doubted. As the reader has seen, the East African Expedition passed to the south of it, and the rivers were there flowing into it. We have just passed along its western side, and we have found no rivers running between it and Tanganyika. At the northern end we have seen that a large river, called the Mkafu, flows into it; conse-

quently there can hardly be any flowing out at the same point. Elton and Cotteril passed along the country to the east, and at a distance of about eighty miles they traversed only a few small streams, which could hardly have come all the way from Lake Hikwa. *Primâ facie,* therefore, we seem driven to the conclusion that it must either have some underground circulation, or that the evaporation and rainfall balance each other. There are difficulties, however, against the adoption of either conclusion.

I am inclined to think that it is in reality slightly below the level of Tanganyika, although that remains yet to be proved. On the other hand, it drains a very large area of mountainous country—an area very much greater in proportion to its size than Tanganyika. We have seen that the rainfall and evaporation nearly balance each other in the latter lake. Where, then, does the water of Hikwa go, or how does it escape? There are also the facts that the water is not salt, that during the wet season the level of the lake rises, and that when the rains have been unusually heavy and prolonged the bordering level strip is submerged.

Fish are said to be numerous, but are not caught, the reason assigned being that the Wafipa never eat fish. There are no canoes.

The whole of the western side belongs to the Wafipa. At the south end the Wasango come in, while round the most of the east side are found the Wakhonongo, now conquered by Nyungu, the robber

chief. North of the lake lies Mpimbwe, occupying a position between Fipa and Ukhonongo.

Finding it quite impossible to reach the actual shores of the lake, owing to the difficulty of the descent, I reluctantly decided to return to camp, as I had brought no provisions and made no arrangements for the three extra days that would have been required to get down and back. On the day following we re-entered Makapufi. The porters, as well as myself, were considerably done up by our rapid journey to the lake, and we therefore halted a day longer to rest.

This sheet of water, seen by me for the first time, I have taken the liberty to call Lake Leopold, on the ground that it is perfectly impossible to fix on its real native name. At different places it is known as Likwa, Rukwa, Hikwa, Hukwa, Mulikwa, and other variations too numerous to mention; which of these is the most commonly used I have never yet been able to determine. So to close all dispute I beg to suggest the name of Leopold, after our student Prince.

On making my farewell visit to Kapufi I found him in the same circumstances as before. He at once produced the guides who were to conduct us. In a capital speech he charged them to take me carefully and safely, not by roundabout or dangerous ways, and to see that the headmen of the various villages supplied me with whatever I wanted. If trouble or danger befell us, they would be answerable.

It appears that it is his custom, when he takes a fancy to any trader, to empower him to levy whatever

he wants from the different villages without payment; and curiously, this exaction is not resisted.

On April 29th we resumed our march to Unyanyembe. A very considerable number of the men were suffering from hæmorrhoids and pneumonia, while I myself was very much troubled with a painful ulcer on the side of my foot. I however allowed no amount of torture or trouble to shorten our daily stages; and as the sick men saw how I bore up under my infliction, they could not for shame's sake grumble publicly. Our average march was nearly twenty miles. Each day, on camping, relief parties had to be sent back to carry in those who failed by the way. But it was a pleasure to see with what a will the men kept at their hard work, and assisted those who were weaker than themselves.

For six days we continued along a great undulating plateau, from 5000 to 6000 feet in height, with low broken hills and irregular little valleys. The wooding was scanty in the extreme, and villages few and far between. The drainage is to the Mkafu river.

On May 4th we reached the village of Kwamanda, the last inhabited by Wafipa, though formerly Kapufi's jurisdiction extended very much farther north. From Kwamanda the usual intervening jungle which separates two tribes had to be crossed, and as it had the reputation of being infested by robbers, we had all to use the utmost circumspection.

On the first day of our jungle march we passed a

celebrated mzizimu, or devil, who had to be propitiated by a present of beads. The legend has it, that many years ago there were many people living in the surrounding country. But war came; the people were killed, and the chief and his wife turned into stone, and became devils who haunted the place. The two mzizimu are pillars of red tenacious clay, capped by flat pieces of stone, which have guarded it from the action of the weather, thus preserving it in the form of pillars, eight feet high and eighteen inches in diameter.

We now reached the edge of the plateau, where a sudden descent of 1500 feet brings us to the great valley through which the river Mkafu sluggishly flows, by marshes, lagoons, and lake-like expansions. It appears as an immense plain, stretching away north and east till bounded by the distant peaks of Khonongo and Mpimbwe. This vast stretch of country was formerly a part of Fipa, but Kasogera of Mpimbwe, and Simba of Usawila, had either taken possession of, or devastated it.

Three marches brought us to the river Mkafu, where it is ten yards broad and ten to twelve feet deep. We had great difficulty in crossing it by means of a felled tree. The Mkafu rises in Kawendi to the south-east of Kungwe, where it is known as the Katuma. It flows through the great plain of which I have spoken, drains the greater part of Khonongo, all Mpimbwe, a considerable area of Fipa, and finally falls into Lake Leopold.

On the 9th of May we reached the village of Gongwe, which, originally only an Arab hunting-station, has now assumed a position of some importance. It holds itself independent of neighbouring chiefs, and owns allegiance only to the governor of Unyanyembe, who appoints a headman, though nominally there is a native chief—that being a wise part of the Arab policy wherever they settle. There are a number of Wangwana, but the population is a mixed one of Wapimbwe, Wakhonongo, and Wanyamwesi. The Wapimbwe are known by having circular tattoo marks on their backs. The village is large, and cleanly kept, the houses being widely separated, and grass not allowed to grow, or rubbish to be thrown down within the precincts of the boma.

After a day's rest to recruit, we started for Simba's. Of the exactions of that chief we had heard sufficient to make us afraid of the interview. To avoid Nyungu, who was in the neighbourhood, our guide tried to take us by a short cut through the jungle, where we lost ourselves, and for two days wandered about among the tall grass, crushing our way laboriously. At last, much to our relief, we arrived at a pathway which the guide knew. We came very unexpectedly upon a robber just when we made this discovery. In a moment he was covered by the gun of our guide, and if he had fired at the same moment the robber would have been a dead man. However, he was for chaffing the thunderstruck criminal, and doubtless recommending him to pray. As I was

immediately behind, I took advantage of his delay, and struck up the gun, which went off harmlessly in the air. I could not bear to see even a scoundrel like an African robber killed before my eyes, so I let him escape.

On the second day, after crossing two large streams flowing to the Mkafu, we camped a few miles south of Simba's. We sent messengers to announce our coming.

Next morning, on watching the men file out of camp, I was struck with shame at the sight they presented. Many were half naked, most of them were in rags, and some even habited in fragments of old sleeping-mats. I blushed at the thought that the porters of a white man's caravan should in such a miserable condition enter any place where Arabs were, and I inwardly resolved that thirty of the worst should have cloth to make themselves respectable. It may be asked what made me ever allow such faithful fellows to become so utterly reduced. I can but answer—necessity. It was neither from choice nor niggardliness. I learned only too early that when the men got new clothes they were not many days till they were tearing them to pieces, and buying pombe, or some similar luxury, with the fragments, and then coming with long faces asking for more cloth. It became absolutely necessary to make them feel that such indulgence could not be tolerated, and that there was little chance of a renewal of their dress when once disposed of.

South of Simba's we left the great plain of the Mkafu behind us, and entered a pleasantly undulating country, rising considerably in altitude. The morning was beautifully clear, and the tints of green, with the lights and shades, produced a charming picture. After a march of three hours we met our messengers, who brought many salaams and compliments from Simba, intimating that two tembès were put at my disposal, and that he had sent two of his own men to bring me to his town—an honour very rarely accorded to any one. On such an important occasion we tried to make our entrance as imposing as circumstances would permit. The path was crowded with Simba's warriors, shouting, dancing, firing off their guns, and clashing their ivory armlets.

Simba's town, which is more properly called Usawila is, without exception, the largest I have seen in Africa. It covers an area of three-quarters of a square mile, and is palisaded all round. Within the palisade are large squares, built in tembè fashion with the doors all facing the interior. The spaces inside and outside of these tembès are occupied by the ordinary native houses.

The tembè given to me had a good broad verandah, which I took possession of, and soon transformed into a comfortable room. The rest of the house was taken up by my headmen and stores, while the porters were scattered over the town anyhow, so that if Simba had been inclined for murder and plunder, we were completely in his power.

We had heard that there were other white men in the town, and on our entrance we were surprised not to see them with a friendly greeting. As they did not turn up after we had been in the town some time I thought that perhaps they might be ill, and unable to come; so I resolved to take the initiative and call on them. I therefore sent off a messenger to intimate my coming, and shortly afterward started myself. Unfortunately, however, my messenger had either loitered or lost his way, and I arrived before him, and consequently took them at unawares.

I shall never forget the sight that presented itself. I found in a small tent, not sufficient for one person, no less than three white men. Two of them were ill, and occupied the two sides of the tent; while the third seemed to have some arrangement for lying partly between, partly across, the other two. They and their clothes had evidently not made the acquaintance of soap and water for an indefinite period, as they were all extremely dirty. When I entered they were about to commence their dinner—a frugal meal of uncleaned sweet potatoes, and some boiled beans, at which any ordinary native would have turned up his nose. These unfortunate individuals proved to be ignorant French peasants, who had joined a Catholic Mission to Ujiji, of which Père Denaud (already mentioned) was now the head. They had gone with him from Ujiji to Unyanyembe by way of Mirambo's. There they had left him, and were now awaiting his coming to go on to Karema. Further than this they

could not tell me. Père Denaud was expected that day, and would answer all my questions.

Regretting that I had thus taken them without warning, I retired; but I burned with indignation at the shameful spectacle presented by these poor ignorant dupes, beguiled away to a life they could know nothing of, made subservient in mind and body to a priest, fed like beasts, and turned into objects of ridicule and pity for African savages.

On leaving them I carried my morning's resolve into execution, and gave clothes to thirty of the worst dressed men. This, however, only bred a crop of annoyances, as all those who had not got any at once disposed of what they had, and surrounded my residence begging for dresses, and exhibiting their wretchedness. As they saw that I was annoyed at this miserable exhibition they became all the more persistent, until I made an example of one or two of them.

In the afternoon, hearing that Père Denaud had arrived, I sent to say that I would call on him; but immediately he came himself, looking as jolly and comfortable as you would expect a good priest with a clean conscience to be, and dressed in such refreshing snow-white garments. He was accompanied by one of his *confrères*, who had got washed for the occasion, but during the interview seemed very uneasy, and said not a word. The good Father informed me that there were two Belgians and an Englishman on their way from Unyanyembe to Karema. In the evening

I despatched a very large present to Simba, and made a further distribution of cloth to some of the men.

In the following morning, while sitting in the verandah of the tembè before sunrise, enjoying the cool breeze, the quiet, and a good cup of coffee, a string of Wanyamwesi came marching forward. Thinking them of no account, I replied in an offhand way to their "Yambo?" and then took no further notice of them, till Chuma appeared and made me aware that the dirtiest and worst dressed among them was Simba himself. Of course there were laughing explanations; and on my politely offering him a cup of coffee he at once accepted it, and made himself at home. Shortly afterwards a herd of bullocks appeared, and I was informed that one was for me. A lively scene ensued in the attempt to secure it.

Simba proved to be a great adept in flattery, and knew how to lay it on for his advantage. He seems to be a man of about forty years of age, with a smile always playing about his face, which, however, is spoiled by an expression of cunning far from agreeable. He told me that he was a son of the great Fundikira, the chief of Unyanyembe when Burton visited the country. He had not been a very dutiful child, and had even fought with his father, the result of which was that he himself had received a number of spear-stabs, which he showed me. He had then been banished from Unyanyembe, and had succeeded in establishing a

colony of disaffected spirits in Khonongo, where he had gradually risen in power and importance. By right he informed me he should be chief of Unyanyembe; but the Arabs had placed his half-brother, Siki, in his place. Nyungu, the celebrated robber, was also a half-brother of his.

At sunset the Kiringosis, in all the glory of their new scarlet cloths, paraded in front of my house, headed by our old flag and the band. I of course made a speech to them in the most approved fashion. I told them of the great things they had done, the strange countries they had gone through without any trouble with the natives. I laid particular stress on the fact that ours was different from all previous caravans, in the quickness of our movements, and in the absence of deaths, desertions, and cases of stealing. We had now arrived on a road they all knew and had travelled over. They would soon be at their homes, to meet their wives and enjoy the rewards of their hard work. My speech was greatly applauded and briefly replied to by one of the Kiringosis, who said that they knew when they had a good master, and could stick to such an one through thick and thin, through danger and hardship, and that they were still ready to follow me wherever I went. Thereafter they marched off as they had come, and commenced a demoniacal dance, which lasted all night.

The town of Simba's is situated on the watershed which divides the basin of the Mkafu from that of

the Malagarazi to the north. The watershed is formed by a low flat-topped range of hills which extends from Kawendi to Mpimbwe.

On May 15th we resumed our march to Unyanyembe, and pushed on with all the energy and haste which had characterized our movements since leaving Iendwe. In their odd hours the men worked away busily at their clothes-making, as I had taken precautions that no one should dispose of them; and besides, they themselves were determined to appear in their best on entering Unyanyembe. I was much annoyed to observe all the headmen making ridiculous scarlet breeches, in which they proposed to disport themselves. I however did not interfere on being informed that it was their custom so to dress on such occasions. Our route led us through a poorly inhabited forest country, which presented no features worth noticing.

On the fourth day from Simba's I had the pleasure of meeting Mr. Cadenhead—a young Scotch gentleman on his way to join Captain Carter. He had accompanied two Belgians to Unyanyembe, and proceeded with them several marches on their way to Karema; but getting disgusted at their proceedings he had quarrelled with them and left them, two days before our meeting. He appeared terribly pulled down with fever, which he had had at Unyanyembe, and when I met him he could speak only with difficulty. We unfortunately had met in the forest, and too far on in our day's march for either of us to turn

back. So after two hours' pleasant chat we parted on our different ways.

Most people, I presume, will be aware of the tragic end of Carter and Cadenhead. The latter arrived all right at Karema, and as soon as the necessary preparations were completed, the two started to return to the coast by a new and more direct way. They crossed my route about ten miles south of Gongwe, and afterwards passed the Mkafu, near some of its lake-like expansions. They reached Kasogera's chief town in Mpimbwe, and as it happened to be threatened by the combined forces of Simba and Mirambo, they were compelled to enter the town. The attack did take place, and the palisades were stormed. Carter drew off his men with the view of keeping out of the conflict; but this proved to be impossible. The victorious warriors began to fire on them. Cadenhead was killed, and a few of the men. The rest fired and fled, with the exception of one or two brave heroes who stuck to their master. In self-defence Carter himself had also to fire, but ran short of ammunition, and finally fell a victim; and all owing to the unfortunate mistake of having entered the town when an attack was impending. A more generous-hearted and genial man never entered on the dangerous path of African travel.

On the day after meeting Cadenhead, I was pushing along rapidly, to make up for the previous day's short march, when suddenly I stopped in surprise at a curious spectacle which unexpectedly appeared. From among the trees of the forest a small calvacade

gradually emerged, led by a half-naked negro, carrying a gun and looking wondrously fierce and important. Behind him ambled a half-bred Muscat donkey, bestrode by a European dressed in white clothes, military riding-boots, and helmet, and wearing blue goggles or glasses to protect the eyes. On one thigh rested the butt of a rifle, held in the hand ready for any emergency, and at his side hung a revolver. While I turned over in my mind the question whether they could be Cadenhead's Belgians, the unknown, apparently very much puzzled at my appearance, approached, and we saluted each other. A second arrived, and then I became aware that I was addressing Messrs. Roger and Burdo of the Third Belgian African Expedition, proceeding on their way to Nyangwe, *viâ* Karema. On my informing them who I was and where I had been, they did not seem to have heard before of my existence, and asked how many years I had taken in my journey. After I had told them the number of months they expressed unbounded astonishment and not a little incredulity.

As the first one I met persisted in looking at me through his blue glasses, I began to feel extremely fidgetty, for I can conceive of nothing more provoking than being steadily looked at by eyes you cannot see.

They had a very sad tale to tell, which I may here give for the advantage of future travellers, though, of course, some parts of it were derived subsequently from other sources. At Unyanyembe the caravan

with which they had come from the coast broke up, as is the custom with Wanyamwesi porters. A new gang had to be procured. Under such circumstances the Governor of Unyanyembe is the usual agent who collects them, takes them before the native chief, and with the recognized formalities binds them to act as porters to whoever the person may be. Of course for his trouble he naturally expects a present, which, is always given with pleasure, as porters so engaged will on no account desert or steal. The Belgian gentlemen, however, thought the Governor's offer to perform the customary duty was only a way to fleece them of their goods without any compensating advantages; so they refused his offer, and proceeded to raise a gang for themselves. This was a simple and easy task. Porters flocked to join them, and soon they had all they desired.

Messrs. Roger and Burdo chuckled over the nice way in which they had evaded the courteous interchange of presents on such occasions. But they were not aware that Abdullah-bin-Nassib, Siki, and the porters, were likewise chuckling in their sleeves. So they gave the usual amount of cloth to the men in advance, and started for Karema. But alas! they were only conducted to the confines of the district of Unyanyembe, and there, at the village of Mlima Ngombè (whose acquaintance we will make in a short time), the porters quietly gathered up their traps and such convenient articles as they could find, and decamped during the night. Whereupon Abdullah-bin-Nassib, Siki the

chief, and all the porters, chuckled still more, the poor Belgians being left to use strong language in the privacy of their own tents.

In this difficulty they so far amended as to ask Mlima Ngombè to give them another gang of porters. Now this chief was a good-hearted fellow, and he said to himself that it was his duty to help the white strangers on their way. So he gave them eighty men. The Belgians, however, who had now become very knowing, refused to give any cloth in advance, remembering how the others had bolted. The men would not go on such terms, and once more they applied to Mlima Ngombè, who declared that his visitors must be conducted to Karema, advance or no advance; and like good subjects the porters consented.

The chief now expected some recognition of his trouble in helping them out of their difficulties and forcing his people to go against their will. But economical considerations again stood in the way, and only a few yards of common cotton were sent. He was of course indignant, and his people were indignant; but the Belgians were heedless. So they started, were taken to the confines of Mlima Ngombè's district, and there they were left stranded once more, not knowing whither to direct their steps for further help.

Thus it was that when I met them they were riding humbly on ambling donkeys to Simba's, to try to get porters there. At that time M. Roger was extremely

ill from dysentery, and could hardly sit upright, though, happily, the round, rubicund face of Burdo seemed to indicate perfect health. I felt sorry, however, that such pleasant gentlemen should ever have left the fashionable resorts of Brussels, in which they were so well calculated to shine, to meet the sad troubles of African travelling.

On the 20th we had to make a short march, owing to the number of men who were lame with the recent hard travelling. I found that no less than sixteen were suffering very severely from the cracking of the thick skin of the heel. My own feet were in a most painful condition with blisters and skinned parts, produced by wearing a pair of new boots, the others having been all cut to pieces while I was troubled with my ulcer.

We had now entered the country of Unyamwesi, in the district of Ugunda, the chief of which was Mlima Ngombè. I was much pleased with the behaviour of the Wanyamwesi. They were neither pressing nor rude, and when they indulged their curiosity, they did so in a manner which did not annoy or offend. The offensive habits of the Wafipa and Walungu were not here observable; cleanliness, both inside and outside the bomas, being the rule. They are generally well dressed, though goat-skins and bark cloth are sometimes worn. Food of all sorts was very plentiful, as was also wild honey.

On the 21st we made the experiment of an early morning march. I was just beginning to sink into

a good sound sleep, when everybody was aroused by the braying of the barghumi. Very reluctantly I turned out at 2.30 a.m. Breakfastless, and without light, we started. Soon I was plunged into the depths of misery and discomfort, as I pushed my way through the tall dewy grass, perplexed by different roads whose directions could not be determined, stumbling and tripping over stones and creepers, smashing up against unseen trees, startled by sudden cries from wild animals, and groaning with excruciating pains in my stomach. At length, after much shouting and losing of paths, day began to dawn just as a village was reached. A hasty attempt at a breakfast proved a failure, and off we went again for other three hours, and camped finally at a small village, thoroughly convinced that early morning marches through shambas and forests, without the light of a good moon, were devoid of all the elements of comfort, and were replete with wretchedness.

On the way we passed a village after daylight where I got some fresh milk. My men were extremely anxious that I should camp here instead of going further on. It was not till next day that I learned the reason of their desire to stay at that particular place. It turned out that it was a village to which Mlima Ngombè had transported about seventy of his wives who had been given to flirting too much with the Wangwana of the various white men's caravans. To stop this matrimonial nuisance he

consigned them to this retired spot, where they would be out of the way of temptation.

On the 22nd of May we entered Igonda, the large and important town of Mlima Ngombè (Coast Bullock) the chief of the Unyamwesi district of Ugunda. We were at first directed to camp outside, owing to his quarrels with the Belgians; but hearing that I was an Englishman, he at once allowed me to enter, and treated me most hospitably.

I gave him a handsome present, with which he was well pleased. Unfortunately, however, he had a very large harem of wives. They, not satisfied with what he gave them, quarrelled among themselves. Finally they fell foul of the poor husband, took every yard of the cloth from him, and, not content with that, stripped him even of the dress he wore. They kept the whole place in an uproar during the day. At last the unhappy chief, driven nearly mad, and not daring to pass the night in the town, fled, and slept out in the fields.

Mlima Ngombè is said to possess 150 wives, who have got the upper hand, and lead him such a dance that he has lost his mental balance, and is subject to periodic attacks of insanity. On the morning after his expulsion he came to me, begging a little more cloth in the most abject manner, and sadly pointing out the few rags his wives had left him. As he had not given me a return present, I refused most emphatically, and expressed myself in such a manner that he retired chopfallen.

From Igonda I despatched messengers to the Governor of Unyanyembe intimating our approach. I also wrote to Dr. Van der Hoevel, an agent of the Belgian International Association, stationed at Unyanyembe.

In spite of our former experience of night marching, we left Mlima Ngombè's three hours before daylight, and soon lost our way, and had a most miserable tramp. At daybreak we found out how to direct our steps, and finally got into the right road in a very disheartened mood.

Next day we passed Kasekerah, the scene of Dr. Dillon's unhappy death; we obtained some new-drawn milk here. Thereafter crossing the Walè Nullah we camped at Mtinusi. Our ambassadors to Abdullah-bin-Nassib now met us, bringing his salaams and compliments, an old china teapot full of milk, and a goat. A house was placed at our disposal, either at Kwihalah or Taborah, as we might choose, but as he had heard much of me, he hoped I would stay near him. Many other pleasant and flattering things he said.

At Mtinusi we made all our arrangements for a grand entry into the Arab headquarters. The men were paraded in their clean new dresses, and looked well.

Early on the morning of the 26th we were all on springs with pleasurable excitement, and made such a medley of noises as could only be heard among negroes in Africa. Getting to clear ground outside the village,

we arranged the order of procession to be observed when we came near Kwihalah, the town of Sheik-bin-Nassib, the brother of the Governor.

In front marched the giant, bully, and butcher of the East African Expedition, appropriately named Ngombò (the Ox). He was dressed in the usual shirt-like garment of the Waswahili. Tied round his neck, and hanging loosely down his back, he had a large scarlet joho. In front he wore a fine leopard-skin. His head was adorned with an immense feather headdress. In one hand he held a huge ox-hide Ubena shield, and in the other an immense Manyema spear. Such a perfect picture of savage magnificence could hardly be conceived.

Following him came the caravan band, the drummer, and the zomiri player, with their faces painted and bedaubed, wearing eccentric headdresses, and black johos flowing to their heels, and also leopard skins.

Next in order marched a boy, dressed also in a black joho, carrying the flag which had led us so many hundreds of miles. This was guarded by three of my headmen, in European coats and jacket, with ludicrous bandera (red stuff) trousers, and voluminous turbans. These had guns slung on their backs, and spears in their hands.

After these came about ten Kiringosis, all dressed to some extent like our leader, Ngombè, but having various other fantastic appendages in place of the leopard-skins.

The main body of porters came next, attired as if they had newly left the coast.

The rear was brought up by myself, in plain tweed clothes, surrounded by a picturesquely clothed group of headmen, in snow-white shirts and wonderful turbans.

Of course the whole caravan marched in single file.

After a four hours' dusty march we reached the low line of hills which lie to the south of Unyanyembe. Topping the crest we halted to get the procession in proper order. Then, after one grand volley from fifty guns, the band struck up, and the men filled the air with shouts, which gradually glided into a rhythmic song and chorus, and which echoed with stirring effect from hill to hill.

We had not been expected till the following day, and our sudden appearance on the crest of the hill, with so much shooting and yelling, threw the whole surrounding country into a ferment. In Kwihalah the people were observed rushing about in consternation. From the distant banana groves of Taborah crowds came rushing out. Runners were descried hurrying towards Kwihalah, the residence of the Governor. As we emerged, however, from among the rocks and bushes we were speedily recognized. Fear gave way to enthusiasm, and answering shots went off over the whole country.

Soon we reached the outskirts of Kwihalah, where great crowds lined the way. Crack, crack, went the guns; the porters sang more lustily; the musicians

blew or thumped more energetically; and the crowds cheered as they had hardly ever done before. Such a brilliant entry had never before taken place. I must own that I felt supremely proud on that day; and who would not on hearing the flattering remarks, and the shouts of surprise, which greeted my appearance? I had been very careful to have a clean shave of such indication of a beard as I possessed, and I looked so young that the Arabs could hardly believe their eyes.

As we had arrived a day before we were expected, we found that the Governor and his brother were from home. So we were conducted to the house set apart for visitors at Kwihalah.

It was with deep and varied emotions that I entered this historical tembè, redolent with the memories of so many travellers in Central Africa.

Hither comes the gallant Stanley in his search for Livingstone. War stops him, and for weeks he is detained within its walls, holding philosophical disquisitions with Sheik-bin-Nassib. Here are the very loopholes he made in its walls when threatened with a siege by Mirambo and his victorious followers. He sets out from it to find Livingstone, and leaves behind him his companion, Shaw, who does not live to see him return. He completes his noble work, and re-enters with the great master of African exploration, leaving him here while he returns home.

Here is the room which Livingstone occupied for several weary months, waiting on his expected sup-

plies from the coast, and ruminating now on "the great open sore of the world," anon on the sources of the Nile. He passes from it to die among the swamps of Bangweolo; and then, transported by a heroic band of negroes, he is brought back a withered corpse to this same tembè.

Next we hear of Cameron and his two companions arriving, after manifold fevers and troubles, to take up their residence in this same place. It however proves no pleasant haven of rest for them. Maddened by countless exasperating annoyances, and weakened by repeated attacks of fever, they struggle through two or three months, groaning at their inability to go forward as they lie here in the verandah.

The picture rises up before me of Murphy, strong and burly, staggering across the floor, and sinking down weak and helpless as a baby. Dillon, too, blind with ophthalmia, and delirious with fever, lies here in sad and sorrowful plight, and he departs only to blow his own brains out.

A few years elapse, and the next occupant is a missionary, Dodshun, who, after having his caravan wrecked by Mirambo and everything scattered, is detained through inability to proceed, and has to depend upon the hospitality of the Arabs. He madly leaves with only one or two servants, and with none of the necessary conveniences. He suffers terrible hardships on the road, and reaches his colleagues at Ujiji only to die in their arms.

The next on the list who find shelter under the

roof of the travellers' tembè are Carter, of elephant fame, and the warlike Popelin. They are not in it many days before fever attacks them, and they have to flee as from a pestilence. A few months more and Mr. Cadenhead, with his two Belgian companions, arrive. They also find no enjoyment, for when not prostrated with fever they are quarrelling with each other; and so they pass a few dreary months.

Now I also have entered the precincts of this memorable house which has listened to so many groans. What is my fate to be?

These somewhat melancholy reflections, however, did not prevent me from commencing to make myself comfortable, and to give the place an inhabited appearance, as I intended to spend a few days to recruit and prepare for my march to the coast.

This completed, I began to wonder at the non-appearance of the German, Dr. Van der Hoevel, to welcome me. I had passed his very door on my entry, and greatly to my disappointment he had never even looked out to shake hands. Thinking that he might be ill, I set off to visit him as soon as I had put my house in order.

Arrived at his tembè, it was some time before I gained admittance. I was ushered into a bare, darkened room, totally devoid of all furniture, and having not a sign of comfort. In the middle stood a small round table, with an Arab coffee-pot and a coffee-cup. Sitting on a camp-chair, with head in his hands and elbows on the table, was the Doctor—

a strong, German-looking personage, wearing coloured glasses. A box and a huge pot of pombe made up the list of articles. I had prepared myself to be almost as gushing and demonstrative as a Frenchman or an Italian on our meeting, but I was rather taken aback by the cool manner in which he received me, as if my visit was only a matter of course, and indeed somewhat of a bore.

He did not particularly press me to return again, though I did go several times more. On each occasion I found him as at the first, sitting beside the table with the coffee and the pombe pots. I never saw him doing anything. He never returned my visit, though I was staying only a few yards from his house, and I never heard of him being seen outside. The excuse was that he was not very well.

In conversation I learned that he had been at Unyanyembe for about eight months, for the purpose of forming a station. In that time he had got the length of choosing a spot on which to build his house. He had also begun to revolve in his head what form it would take, and how it was to be done. His greatest achievement, however, was the mortal enmity he had aroused against himself on the part of both Arabs and natives. He had succeeded in outraging every custom and usage which they held dear, until he had cut himself off from all friendly communication with them, and nothing would have given them greater pleasure than to do him an ill turn, or to thwart any project he was

capable of conceiving in his brain. So far was this carried, that in a district where cows could be counted by the hundred, he actually could not get a drop of milk. He had been asked frequently to attend professionally some sick Arabs, and repeatedly he had ignored their requests—so the Arabs informed me.

And this is a man who has been selected by the Belgian branch of the International Association to carry out their grand programme of opening up benighted Africa!

I found that my great safeguard against trouble on my route, in the region surrounding these stations, was to let it be clearly understood that I was an Englishman, and had no connexion whatever with the Belgians. For be it understood the Central African negro is not so benighted as to confound all white men together. He very clearly understands the difference between an Englishman and other white men.

My reception by the Arab merchants was of a princely character, and marked by unbounded hospitality. Before I had been at Kwihalah twenty-four hours, I had received ten bullocks, several goats and sheep, numerous fowls, fruit of different kinds, eggs, bags of rice, and immense quantities of capitally-cooked food of the most varied character, sufficient of itself to feed all my men.

In deference to the customs of the Arabs, I kept up as great state as possible—in fact, held quite a court, with my sentinels at the door, my guard

ready to turn out to receive Arab visitors, and my staff of headmen.

The Governor and his brother almost competed with each other in acts of courtesy and hospitality. They entirely put themselves at my service, and thought no amount of trouble too much.

On the third day after my arrival, chaperoned by the Governor himself, I prepared to pay a ceremonial visit to all the principal Arabs.

Having been warned beforehand that it was customary to take an escort and make as much display as possible, I employed the early morning hours trying to produce a uniform and soldierlike appearance among the thirty men who were to accompany me; and upon the whole succeeded wonderfully well.

About eight a.m. the Governor, with his brother and a numerous turn-out of relations, dressed all in the most snowy white and riding on Muscat donkeys, arrived. As I mounted the animal which had been brought for my convenience, we all fell into line, and formed a most imposing cavalcade, with fifteen men in front and fifteen in the rear of the long procession of donkeys, and all in single file.

Passing round the edge of a hill, we came in sight of Taborah, the chief headquarters of the Arabs. It appeared like a dense square grove of deep green bananas, among which a few houses could be descried.

As we neared the confines of the town and came in sight of the tembè of the first Arab on our way, I was immensely tickled by the manner in which the

donkeys announced our approach. In front of the tembè there was another of those useful animals, standing ready for employment when wanted. The moment our dozen chargers caught sight of it, with one accord they elevated their heads, put forward their ears, whisked their tails as they opened their mouths, and at the full pitch of their sonorous voices made the very earth vibrate with the volume of sound. One donkey is usually bad enough, but when a dozen join in concert the effect is terrific. The moment the braying was heard, the owner of the tembè was seen to rise hastily from his seat on the verandah and hurry inside, from which he reappeared dressed in his best as we approached. The episode appeared to me so ludicrous that I could not keep from bursting out in laughter, until I could hardly sit upon my agitated donkey, very much to the astonishment of my dignified Arab escort, who are accustomed to the braying of the donkeys, but not to such unseemly exhibitions of laughter. At nearly all the tembès our approach was announced in the same amusing way.

At each place I visited I was expected to eat something, and abundance of the most savoury messes, cakes, curried meats, sweetmeats, &c., were placed before me. Being curious to taste as many of the dishes as possible, I am afraid I ate more than was good for me, though, fortunately, without any bad results. At most places I was left to eat alone, but at one large trader's a most elaborate repast was spread

for the whole party. We all sat down on the ground, round a huge tray, which held all sorts of dishes—vermicelli swamped in sugar, various delicious curries, boiled mutton, fruit, rice, tea thick as honey with sugar, and a great variety of wheaten and rice cakes. As there were no spoons, and no knives or forks, I was at first rather loath to begin, though the others made no scruple, and disposed of the food with great gusto. The Governor, seeing my hesitation, at once made a fierce grab with his hand at a very greasy curried fowl, and began tearing off pieces of the flesh, laying it beside me, and inviting me to eat. The ice once broken, I threw myself with *abandon* into the enjoyment of this novel feast. I was very much surprised, however, at the way in which they ate. First one would take hold of a leg of curried fowl with his hand, and demolish what was on it; then, with his fingers sticking with the grease and the curry, he would pick up a handful of rice, leaving some of the curry and grease behind; then he would try vermicelli, or cakes, or fruit, or it might be a drink of tea. As every one did the same, it soon became almost impossible to distinguish one dish from another. So much did they become mixed, that in the end the whole formed one huge heterogeneous hotch-potch.

At the tembè of one of the Arabs whom we visited I was presented with three fresh cocoa-nuts, grown in his own plantation, which shows that cocoa-nuts, however rare inland, are not necessarily restricted to the sea border. Another Arab, Salim-bin-Seff, honoured

us with a meal served on a table, and in china dishes, with chairs to sit upon.

At each place we visited our escort of thirty men, were presented with as much as they could take. The consequence was soon noticeable. One man after another ate more than he could bear up under, and had to remain behind, until very few returned with us.

I spent several pleasant days in a more unostentatious manner, making visits of courtesy to different Arabs, strolling about the market, and generally learning as much of Unyanyembe life as possible.

On the 1st of June I paid a ceremonial visit to the Governor, and Siki the chief. The latter appeared in a clean Arab dress. He is very plain-featured, but otherwise is the most civilized native I have yet seen. He politely informed me that he would have come to see me before, but that he had been ill. He was very glad that I was looking about and seeing everything, as he did not like people who shut themselves up and saw nothing and nobody. At Kwikuruh he has eighty wives, which, however, do not represent half his marital possessions, as he has others scattered over all the districts. He keeps them chiefly as a matter of dignity, and does not trouble himself with visiting them. They are thus left very much to their own sweet will, and strangers found about the premises are not usually asked awkward questions.

Notwithstanding the long residence of the Arabs at

Unyanyembe, they seem not to have left the slightest impress of their customs upon the Wanyamwesi. The barbarous habit of burying people alive with a dead chief still prevails. When the last Sultan, Mkasiwah, died, they dug a huge pit, in which they placed the chief in a large bark box, in a sitting posture, with one hand at his face and one of the fingers of the other pointing upward; beside him were placed two men and two women, and then the whole was covered over. They look upon the graves of their chiefs as sacred, and carry food and pray there.

About six weeks before my arrival, Siki, the present Sultan, became ill, and suspecting black-magic, he killed two of his father's wives, and all his brothers and sisters, to the number of nine.

The rest of my stay at Unyanyembe was marked by the same hospitality and kindness on the part of the Arabs, and by the same neglect on the part of the Hermit of Kwihalah, who never ventured over the doorway to see me. The chief incident, however, was the return of M. Oscar Roger, half dead with dysentery and ophthalmia and the hardships he suffered on his way back. It appears that on the day after I met him and his colleague they were compelled to halt, and M. Roger being very ill, it was thought advisable that he should return and place himself under the care of the doctor. He began to improve before I left him, but he was then quite blind in one eye.

On the 7th of June, having made every necessary preparation and rearranged loads, we commenced the

last stage of our journey. Our caravan was now raised to its old proportions, by the return of all the men whom I had despatched homeward from Uguha after our return from Urua. They had taken matters very easy, and having succeeded in imposing upon the Governor with their lies, I found them enjoying a luxurious life at Unyanyembe.

We made very long marches, as we had hardly any loads left, and the men were as anxious as myself to get along.

On the 13th we reached Tchaia by way of Tula. We here passed the scene of Penrose's death, which is only too well marked by the broken boxes, sections of a boat, torn books, &c. The place where he made his solitary and gallant stand is still pointed out, and the story goes that the man who scalped him is now slowly dying of a loathsome disease. We camped a few miles further on, at a place called Matamombo, where nothing drinkable could be got but some black liquid mud of the most filthy description, in which buffaloes, rhinoceroses, &c., had been wallowing.

We were now in the dreaded Mgunda Mkhali, "the fiery field," where many a porter has sunk down to die of exhaustion and thirst, the watering-places being few and far between. We were fortunately crossing it about the best time of the year, just when the crops had been reaped, and the sun had not yet quite dried up the pools.

On the 17th we arrived at Kwa Muinyi Mtwanna,

a place of considerable importance, owing to its position on the borders of the Mgunda Mkhali and Ugogo. We were compelled to rest a day here, as the men were all done up with the trying march from Unyanyembe.

On the 20th we entered Ugogo, and made our first acquaintance with the Wagogo in the populous district of Mgundugo, which lies north of Mdaburu. Regarding this tribe I need say nothing, as it has already been pretty well described by so many of our travellers. I, however, was favoured with a better reception than many seem to have got, as I was seldom detained, although I had, like others, to pay a very exorbitant hongo.

At Kwa-Muinyi Mtwanna I had officiated at the marriage of a porter and a freed woman-slave from Unyanyembe. For three days she was well treated, and not required to do any carrying. At Mgundugo, however, we had a melancholy instance of the sad awakening which awaits those who rashly enter matrimony without a proper notion of its character and duties. I was aroused early in the morning by most heartrending screams, proceeding from the hut of the newly married couple. On inquiry I learnt that Mrs. Kombo had dreamt during the night of her late husband (she had been married before), which meant that he was uneasy in the other world, and she was much troubled in spirit in consequence. In the morning she related her dream and her forebodings to her new husband, and beseeched him to kill sheep

and fowls, and make a great feast, that the soul of her dead mate might rest in peace, and be satisfied.

Thereupon Mr. Kombo replied that, "If it had been her father or her mother, or any of her relations, he would have cheerfully complied with her request, that their souls might be comfortable; but to do so for her late husband—he would be hanged first! and the defunct spouse would remain long in purgatory before he would stir a finger to release him."

At this the "fair" dreamer, in the manner of females in all lands, felt aggrieved and indignant. She wanted to know why he married her if he would not please her in this matter; and finished off by calling names. Then Kombo's wrath likewise rose, and he forthwith proceeded to "organize" her, and bring her to a proper frame of mind, by soundly belabouring her with a stick, until the whole camp was aroused by her shrieks. I felt this was a matter in which I could not interfere, though I recommended leniency. I therefore left them to come as best they could to a clear understanding between themselves.

In ten days we traversed Ugogo without any special misadventure. The most annoying feature of this march was the extreme cold at night. As soon as the sun set, a frightful wind commenced blowing from the Usagara mountains, which swept unopposed over the dreary wastes. So cold did it usually become

that the men could not sleep, but spent the night crouched round the camp fires.

On the 30th of June we left Ugogo behind us, and made a waterless march, commencing at midday. Before starting, each man filled as many calabashes as he had with water, then we trudged on till sunset, when we stopped to cook food. At 2·30 a.m. next morning, when the moon rose, we recommenced our march over the Marenga Mkhali, or "desert of bitter waters." As in the case of the Mgunda Mkhali many porters frequently succumb to the hardships of this dreadful tract of country. After six hours' very hard tramping we reached Chunyo, beside which is a spring situated in a pass leading to Mpwapwa, through a spur of the coast mountains. We rested here for an hour and a half, and then started again for the mission-station at Mpwapwa, which we reached in four hours, being most hospitably received by the missionaries there. I spent three delightful days at Mpwapwa, and had numerous opportunities of seing the capital work that is being done, especially in the medical and surgical department presided over by Dr. Baxter.

On Monday, July 5th, the *réveillé* was sounded, according to our custom when a march was intended, and in half an hour we were *en route*. We chose the road which leads by the Mukondokwa valley to Bagamoyo, on the coast, because by our messengers we had made arrangements for dhows to convey us to

Zanzibar. The road which goes to Saadani, further north, is now the one preferred by most caravans, as being more healthy, and not so difficult to traverse.

On the first day we terekes'd—that is to say, camped without water—and on the following day we passed the charming mountain lake of Matamombo or Ugomba, entered the picturesque and well-wooded gorge of the Mukondokwa river, and camped at Kirasa, having marched nearly seventy miles in two days.

The change from the plateau of Ugogo to the mountains of Usagara was of the character of a transformation. In a few hours we passed from burnt-up, waterless deserts, where the harvest had been reaped a month previous to our arrival, into the midst of magnificent scenery, with roaring cascades, luxuriant forest patches, green and grassy hill sides, where the crops had not yet begun to ripen. It was as if the year had been suddenly thrown back two months. The refreshing nature of the change may be well imagined, after our wearisome toiling through Ukhonongo, Unyamwesi, and Ugogo. We drank the crystal water as if such a luxury had never been seen before. We never tired bathing in the stream, and otherwise disporting ourselves as if we had escaped from a prison. The change in the vegetation and the season was of course owing to the sea breezes being caught by the mountains, preventing

their passage over the plateau, and causing the clouds to deposit their loads of moisture.

On the fourth day we emerged from the picturesque gorge of the Mukondokwa, and entered a magnificent plain, of immense fertility, dotted everywhere with villages, and supporting a large population of well-dressed, and evidently well-to-do natives, with a considerable sprinkling of runaway Arabs burdened with financial difficulties.

Having heard on the previous day that a Frenchman was staying at a village a few miles from the mouth of the gorge and near Rehenneko, I turned off the road to visit him, and ascertain who he was. After some hunting I reached the native house he was dwelling in, and was ushered into its gloomy recesses by an Arab. As the room was quite dark, I could distinguish nothing; but with the usual salutation I held out my hand. The salutation was returned, and my hand grasped by some skeleton fingers. I then learned that the white man was a Captain Bloyet, who had been sent out by the French branch of the International Association, to found a station among the neighbouring mountains. He had arrived some weeks ago; but for the last eleven days he had been utterly prostrate with fever. He was really extremely ill, and could hardly stand. But what surprised me was the fact of his residence in an unhealthy village surrounded by swamps, when within two or three miles were healthy and picturesque hills, where he might have bidden defiance to the

fever. He earned my gratitude by forcing me to take a good supply of biscuits, though I had the pleasure of making it up to him in tea and sugar, of which he had run short.

Next day we commenced the crossing of the Makata plain, which we found unpleasant enough. Giraffes, buffaloes, and zebras were very common; but we were too anxious to get on, to stop for sporting purposes. We felt as if drawn by a powerful magnet, which every day increased its irresistible power.

In these long marches I had a considerable deal of inward gratification in finding that I could beat my men completely. There was not a man in the caravan who could march with me. One after another they all broke down and had to fall behind. In any ordinary march of a week or a fortnight, few Europeans could compete with a Zanzibar porter; but let them continue, as we had been doing for several weeks, and it will be found that the European will gradually become inured to the fatigues. Each day these will become less, and he will be able to walk further and further. With the porter, on the other hand, the reverse takes place; he becomes worse instead of better, and gradually succumbs.

On the 10th, just before reaching the important village of Simbaweni, I was delighted by the appearance of my men with letters from the coast, of which I had had none for eight months. It was raining hard

at the time, and I therefore restrained my impatience till camp was reached. I kept the men in front with the letter-bag, on which I feasted my eyes and exercised my imagination. At three o'clock we reached Simbaweni, and then the bag was opened, and I revelled in the enjoyment of good news. There was no lack of marks of Mrs. Kirk's thoughtfulness and kindness, in the shape of jam, biscuits, a bottle of port wine, and a few numbers of *Punch*.

Three marches from Simbaweni, and a speck on the horizon was seen which brought us all to a standstill, with feelings akin to those we had felt when the waters of Lakes Nyassa, Tanganyika, and Leopold first gladdened our eyes and raised our spirits. The little speck we now saw was the Indian Ocean, and we felt that now we had practically finished our journey. Mrs. Kirk's bottle of port wine, and a bottle of brandy which we had carried unopened over the whole extent of our journey, were brought forth with much ceremony, and we proceeded to celebrate the occasion in the customary manner. My men betrayed no reluctance to quaff the forbidden liquor, and I myself, though up to that time an abstainer, had no compunction in laying aside my prejudices for the time being.

At night we camped near the Kingani river, from which we despatched messengers to apprise the Governor of Bagamoyo of our arrival. Next day we crossed the Kingani in canoes, traversed a few miles

of barren plain, and finally reached the well-cultivated ridge which lies to the west of Bagamoyo, and is picturesquely covered with cocoa-nut and other palms, guava, papaw, mango and other fruit-trees.

When within a few miles of Bagamoyo, we were met by our messengers, accompanied by a number of Arabs and slaves sent by the Governor and the Customs' Master to bring me into the town. The slaves brought whole loads of oranges, young cocoa-nuts, mangoes, dates, about two dozen bottles of soda and other aërated waters, together with brandy, &c., in fact such a supply of luxuries as I had not seen for fourteen months. I did not delay our march to dispose of them, but keeping the bearers of all these good things beside me, I continued my way, doing full justice to each luxury in its turn, in such a hearty manner as makes me now surprised that I survived the onslaught.

Another hour, and amid the exclamations of a great crowd of Arabs, Hindus, and Waswahili, together with shooting, drumming, and other adjuncts of an African triumph, we entered Bagamoyo. We did not present the usual appearance of a returned caravan which had travelled over some 5000 miles. The men were not careworn or ragged, decimated with disease or bloodshed. All were well dressed, well fed, and in the best of health and spirits.

For the last time we called the roll, surrounded by Arabs and natives, as we had done at Dar-es-Salaam

fourteen months before; and of the 150 porters who had left the sea coast, only one was not present to answer to his name. But, alas! the voice which had first called the roll was now silent in the green primeval forest of Behobeho.

I consider it the greatest of my triumphs that in the pursuit of knowledge, and in the attempt to open up benighted Africa, I have not stained my enterprise by sacrificing the lives of men. I feel it is something to be justly proud of that on no occasion have I ever allowed myself to fire a gun either for offensive or defensive purposes. My march in itself may have presented nothing startlingly new, or thrillingly sensational. I shall be satisfied if it has shown that after all the Zanzibar porter is infinitely better than he has been usually represented. I have no desertions to record, no plundering, and but few annoyances. I can say of my men that they have remained faithful to me through manifold hardships and dangers.

Of the natives, also, I have on the whole nothing but a good report to present; for everywhere, except among the Warua, I met genuine hospitality. No attempt was ever made, except by the one tribe, to steal a single article from me. No persistent obstruction was ever thrown in my way. Guides were supplied to me generally whenever wanted, and extortion was rarely applied. If ever I was in danger of my life or in fear of an attack, it usually turned out that the natives were under

some misconception, which only required to be removed to make them our firm friends. In this matter also the Warua were of course an exception. My conviction is, that no one can live among and honestly study the Waswahili without developing a great affection and regard for their many excellent qualities. And these are easily to be discerned if the student will but penetrate the outer crust of barbarism which enshrouds them.

The Customs' Master and the Governor of Bagamoyo vied with each other in doing us utmost honour while we were with them. As at Unyanyembe, presents of fruits, &c., poured in on us in lavish abundance.

Next day we embarked on board three dhows, and with a fair wind soon ran across to Zanzibar, the harbour of which we entered with the usual amount of noise.

Dr. Kirk and family I found to be away at their shamba, and there I had the pleasure of surprising them. On the following day all the men marched in procession through the town to the Consulate, to get that which they prized more than anything else, their meed of praise from the Baluza, Dr. Kirk. They went through a variety of war-dances, which they had learned up country, much to the amusement of the assembled crowd.

I was extremely gratified by the appearance of a messenger from the Sultan, conveying his salaams and congratulations, and bringing a present of 80 rupees

to the men. Such a present the Sultan had never been known to give before.

In a day or two all the men were paid in full; and a week after my arrival I embarked on board the B.I.S.N. steamship "Assyria." I left Zanzibar almost with a feeling of regret.

CHAPTER VI.

RESULTS AND REFLECTIONS.

No book on African travel would be complete without some special references to such subjects as slavery, the opening up and civilization of Africa, the trade of Africa, &c. To these, then, in conclusion, I shall briefly invite the reader's attention.

Since the time when Livingstone startled the civilized world with his descriptions of slave-hunting and of the horrors of the slave path, as he had seen them about the Shiré and Lake Nyassa, along the Rovuma and the Kilwa route, away in the heart of Africa by the shores of Lake Moero, and at Nyangwe on the Congo, a great and beneficial change has come over that vast region which may be called East Central Africa. On Nyassa and the Shiré slavery has received its death-blow at the fountain-head, by the establishment of the Livingstonia and Blantyre Mission Stations, which, in this respect, are so faithfully carrying out the dreams and wishes of the great Apostle of Africa. By the stoppage

of the export trade, and by the enlightened action of Syed Bargash, the frightful atrocities of the Kilwa route are things of the past; and on the Unyanyembe road slaves can only reach the coast by a secret system of smuggling.

The Sultan has of his own accord (though probably prompted by Dr. Kirk) made the transport of slaves on the mainland illegal, and any Arab caught violating the law has his goods promptly confiscated. Several cases of this summary punishment are well known, and they show how thoroughly in earnest Syed Bargash is in his endeavours to put an end to the traffic—a fact which is all the more praiseworthy when it is remembered that slavery is bound up with all the institutions, ideas, and customs of Arab society.

Such traffic as still exists is now purely inland, and that may be expected to continue more or less for some years to come. Occasionally a few slaves are smuggled on to the islands of Zanzibar and Pemba, but the capture of a slave-dhow is one of the rarest of events. On the mainland, also, the traffic is practically nothing compared with former years, though there perhaps never was a greater demand for slaves along the coast, owing to the very large extension of plantations by the Arabs. These of course require a proportionately large number of servants to work them, and as the coast tribes will not engage themselves for such work, there is hardly any other resource than the purchase of slaves. As long as there is a demand of such a pressing nature, so long may

we expect the continuance of the slave traffic. It cannot now, however, be done openly. The Scotch Missions have stopped it where it was once most rampant. The Universities' Mission has a station near the Kilwa route, where the atrocities of the trade were most appalling. The Church Missionary Society have likewise vigilant agents at Mpwapwa, and few slaves are allowed to pass unseen from Unyanyembe to the coast.

But though the hideous traffic is scotched and almost killed on these main lines, yet I learned sufficient to make it clear that a considerable number of slaves reach the Arab settlements on the Mlima, more especially that great stronghold of slavery, Kilwa. While passing through Mahenge I heard of a number of slave caravans having bolted into the bush on our approach; and I am convinced that from the Makangwala, the Wasango, Wahehe, and Mahenge, considerable consignments of slaves pass down the Rufiji valley to Kilwa. Pangani, on the river of the same name, is perhaps the only other place where the traffic in slaves has not been practically extinguished.

For the great and noble work which has thus been accomplished there are three men who, above all all others, deserve the credit—Livingstone, for first unveiling the horrors of the traffic and drawing public attention to it; Dr. Kirk, who has spent the greater part of a very energetic life in educating Syed Bargash to such enlightened endeavours to stop the

trade as far as lay in his power; and lastly, the Sultan himself, who has proved to be a pupil as apt and unprejudiced as he is influential.

In the interior, slavery still goes on unchecked, except so far as the stopping of the coast traffic has affected the demand. Yet throughout the wide area of country I traversed, I saw hardly any signs of its existence, and of its actual atrocities I witnessed practically none. There are three main lines of the traffic —one from Manyema by way of Uguha and Ujiji; a second from the region of Lakes Bangweolo and Moero, passing through Iendwe and Fipa; the third comes from the Victoria Nyanza region. On these three lines, the main object in collecting slaves is to get, at a very cheap rate, carriers for ivory, who will practically entail no expense for feeding and clothing on the road, and who can always command a price at Unyanyembe. The traffic in slaves alone would never repay the traders, the main value of the slaves simply being that they act as unpaid carriers.

At Unyanyembe there is always a considerable demand for slaves, for two purposes; first, for the ordinary one of display, and for cultivating the Arab plantations; and second, for disposing of to the Wagogo for ivory—these people, unlike most native tribes, being importers of slaves. Of the influence exercised by the practical stoppage of the slave-trade on the coast I have already spoken in treating the subject of the Wazaramo. I need not further enter upon that matter here.

We now turn to the somewhat more difficult subject of the opening up and civilization of Africa.

A few years ago, when Europe was stirred by the striking adventures of some of our later travellers, Livingstone, Stanley, and Cameron, and united, with royalty at its head, to form an International Association for the opening up of Africa, a general belief arose that at last a new era of hope for the Dark Continent had been ushered in. Anticipations of civilizing centres dotted over the length and breadth of its vast area, were held by the more sanguine. Few corners were to be left unveiled. Everything that was good and great in Europe was to be transplanted to African soil, and under the nurturing care of International pioneers to be reared and developed. Travellers and other scientific men were to receive every assistance. Trade was to be introduced and developed; and of course Christianity, of whatever creed, was to be fostered and encouraged.

What has really been the result? Some years have passed, and as yet we have only the sublimely ridiculous spectacle of united Europe knocking its head idiotically against a wall, betraying an utter inability to grapple with the difficulties of the case, and making itself a laughing-stock to the benighted negroes whom it undertook to enlighten.

The object proposed to be attained is indeed worthy of all praise, and as laid down on paper cannot be found fault with. The great error has been that the men at the helm have been utterly unsuited for their

task. These men have gone out professedly on a mission of "peace and goodwill," and have only succeeded in making every tribe they have yet come in contact with their mortal enemies. Their so-called stations have become simply centres of disturbance. The European has been lowered immensely in the eyes of the natives; and a barrier, which it will require years to sweep away, has been raised against the very interests they have been appointed to advance.

Expedition after expedition has been despatched, only to arrive at its destination exhausted and worn out—if indeed it has not found itself compelled to halt half way. Such a pitiable spectacle has never before been seen in all the wide field of African exploration. Not a station has yet been fixed which deserves the name, not a traveller assisted (the would-be helpers themselves require to be helped), and not a single desired object attained. Clearly united Europe has found Africa a harder nut to crack than it expected.

Still it is to be hoped that the effort will not be given up, though the question of men and methods must be reconsidered. Out of the ruins of abortive and miserable attempts some good may yet arise Phœnix-like. If the lesson of past failure is fairly looked at and laid to heart, and if those in charge of this imposing enterprise will only do themselves the justice of going upon facts and not fancies, it is not impossible that the plans of the International Association may yet in some measure be carried out.

It must, however, be a source of satisfaction to us to find that where International effort has failed, an unassuming Mission, supported only by a small section of the British people, has been quietly and unostentatiously, but most successfully, realizing in its own district the entire programme of the Brussels Conference. I refer to the Livingstonia Mission of the Free Church of Scotland. This Mission has proved itself in every sense of the word a civilizing centre. By it slavery has been stopped, desolating wars put an end to, and peace and security given to a wide area of country. While preaching the doctrine of "peace and goodwill towards men," the missionaries have exhibited a catholic and enlightened spirit truly admirable.

Practical men are among them teaching the natives a variety of trades, showing them how to build better houses, and to cultivate their fields to more advantage. These representatives of the church have not thought it unworthy of their cause to connect themselves with a trading company, and by this means they propose to introduce legitimate commerce. Moreover, not to be behind in helping on whatever may tend towards the ultimate good of the country, they make their station a scientific as well as a missionary centre. Geography and geology have both received valuable contributions by the admirable work of Mr. James Stewart, C.E. Botany also has benefitted to no small extent; as well as meteorology and kindred sciences.

Then, as if to make the work still more thorough, we learn that roads have been constructed, and that more extended schemes are in contemplation. A line of steamers now connects the mouth of the Zambesi with the north end of Lake Nyassa. Surely here are exploits being done which ought to make us proud of our nation, showing, as they do, how thoroughly the broad and catholic spirit of Livingstone still survives among his countrymen.

Worthy also of all praise are the efforts of the London Missionary Society, which have been so signally successful on Lake Tanganyika, though working under even greater difficulties than their brethren on Nyassa. I can bear testimony from personal observation to the real solid civilizing work that has been accomplished. The missionaries at Ujiji and Mtowa have won the complete confidence of all the natives they have come in contact with; and though they may not yet have gathered in a very great "harvest of souls," of which some missionaries give frequently such glowing accounts, yet they have considerably raised the moral tone of their neighbourhood, and, as it were, elevated public opinion—a very great achievement indeed, and one which gives much promise of good yet to come.

With these two Missions continuing their work in the liberal spirit in which they have commenced, I cannot but express my personal conviction that there is a boundless field of hope and promise opened up for the natives of East Central Africa.

Connected with the opening up of the Dark Continent there are one or two subjects which require special consideration. These are trade, transport of goods, and roads.

The question of the trade of a country is one which has always a deep and special interest to the English commercial world. A great continent, with its commerce as yet undeveloped and only in its infancy, has peculiar claims upon the attention of a country which so much depends upon finding marts for its manufactures.

Africa is such a continent, for with the exception of narrow strips round its borders, and the traffic in ivory, it is practically unworked. What prospect, then, does it hold out to us?

Nearly all travellers who have visited the interior, as well as writers on Africa who have sat at home, have made a point of giving full scope to their imagination, and can hardly find words to express the immense possibilities of the African future. By affording a new opening to British enterprise, Africa is to prop up our country for a century or two to come. Africa is going to be ready to take unlimited quantities of calicoes from Manchester, of nicknacks from Birmingham, and of cutlery from Sheffield, and indeed is to give a renewal and immense impetus to British trade in all its branches. Africa, in short, is to be the future hope of Britain, and a very El Dorado to all traders enterprising enough to enter and establish themselves.

If asked what they expect to get in return for British goods, the would-be traders cite the opinions of various travellers; and truly many of these opinions bear a sufficiently roseate hue to account for all the expectations that have been formed. Cameron has waxed eloquent on the infinite possibilities and the "unspeakable riches" of Africa. He has drawn out a list of articles, in which we find gold, silver, iron, coal, copper, india-rubber, ivory, oil, beeswax, cotton, rice, tobacco, coffee, hides, &c. Stanley also has not been behind in giving free play to his brilliant imaginative genius, and has left it to be generally understood that the fortunate speculator who will first run a railway to the Great Lakes will ever afterwards roll in gold. Livingstone, more cautious and sober, has indeed spoken of Central Africa as of great richness, but wisely leaves us to imagine for ourselves in what the richness consists. He, however, conveys the impression that it is more a field for the missionary and the philanthropist than for the trader.

The belief in the astonishing capabilities of the African interior has been very materially advanced by the impenetrability of the country, and the mystery which has enshrouded it till within the last few years. In all ages it has been the natural tendency of lively imaginations to conjure up fabulous wealth in such places, and Africa has been a peculiarly favourable field for such an exercise.

Our faith in the reports of some of those travellers who have really travelled in the country must be very

much shaken when we find how simply, and almost willingly, they have been led astray. One, for instance, on the report of a native that much iron is worked on a mountain, concludes that it is a mountain of iron. I crossed that mountain, and found only a few nodules in the soil. Another observes some nodules in the soil, and concludes that all underneath is iron. With the same unrestrained exercise of fancy, he sees a black rock in a precipice, and forgetting that there is more than one kind of black rock, he calls it coal. He also sees a white one, and names it chalk.

Almost all travellers have noticed the fact that over the length and breadth of Africa the negro tribes work their own iron for making spears, axes, hoes, &c. They consequently speak of the widespread abundance of iron, leaving the reader to conclude that the negro gets his material from lodes or beds of iron, as we do in our own country, forgetting that a tribe of several thousand will not use up a ton of iron in the year.

In opposition to all these roseate views, I unhesitatingly express the opinion that over the wide area embraced by my route, and which may be taken as representing East Central Africa, I have not seen a single article except ivory which it would pay to bring down from the interior. In this sweeping remark of course I do not include the low-lying coast regions, of the possibilities of which I have already enlarged in Chapter IV.

Without the slightest reservation I can state that, though I was specially watchful for such, nowhere have I seen a single mineral in a form which a European would for a moment attempt to work as a profitable or reasonable speculation.

The iron which is wrought by the natives does not occur in beds, veins, or lodes. In every case which has come under my notice, the iron has been simply nodules from the soil, or small quantities of bog iron ore deposited in marshy places, or from sluggish streams charged with iron in solution, and derived from the denudation of the granitic and metamorphic rocks which form the main mass of the Central Plateau. This iron in solution becomes precipitated under certain conditions, and forms small quantities of workable material sufficient to supply the simple wants of the natives.

In opposition to this may be put Mr. James Stewart's statement, that he discovered in Mambwe, between Nyassa and Tanganyika, a bed of solid iron three feet thick. He may really have done so, but I am very much inclined to believe that he is labouring under a mistake. I passed over the same ground before him, and examined what probably was the same bed, and it appeared to me as a bed of gravel cemented into a solid mass by the precipitation and infiltration of iron, and thus having the appearance of being almost entirely iron. The surrounding country, however, is level and marshy, presenting favourable conditions for the formation of bog-iron ore, and possibly

such a bed as Mr. Stewart describes may have been thus formed. Such a case, of course, could not affect the general question of the iron riches or poverty of the country.

Of copper we can speak with more confidence. There is only one place where it is certainly known to occur in any abundance, and that is Katanga, a district as yet unvisited, but famed all over Inner Africa as the source of all the copper used by the natives. This mineral is supposed also to occur in Uvira, to the north of Tanganyika, and also in Uganda; but if it is actually found, the fact is kept carefully secret.

Gold occurs at Katanga, but Cameron certainly must have been mistaken when he speaks of silver being also there.

Of coal I saw none, and nothing would surprise me more than to learn that such a thing exists in the wide area embraced by my route. The geological formation of the Plateau is entirely against the idea of its occurrence. Mr. Stewart mentions that in a small area near the north end of Lake Nyassa he found considerable beds of coal. Very unfortunately, however, for that gentleman's opinion, he also announces that he picked up a piece of coal between the two lakes, but curiously enough at a part where the underlying rocks are ancient metamorphic. The coal which he found on Nyassa cannot be of the slightest commercial importance in this generation, whatever it may be in future ones. On the Rovuma coal is

certainly known to occur, and if found there in any abundance it may of course become of undoubted consequence.

We now come to speak of other possible articles of trade.

India-rubber is an article of considerable commercial value on the coast, but in the interior it is not found in quantities worth gathering. Between the lowlands and Tanganyika it does not occur. Once only have I seen on that lake the creeper from which it is extracted, though it seems to show itself occasionally in the Congo valley.

Of gum copal I can even speak more emphatically. Nowhere has it ever been noticed on the Plateau. On leaving the lowlands it entirely disappears. I have not yet met an Arab who has seen it in the interior.

The other natural products of the country are scarcely worthy of consideration. For the coast lowlands, indeed, there is possible a great future in cotton, sugar, oil, cereals of various kinds, cloves, coffee, and a variety of vegetable products. But for the interior, with its barren deserts and dreary steppes, its tracts of bush and its unprofitable mountains, there seems to be little of either hope or promise. Of course one can never say what trade may arise. There *may* be a wonderful future before it. I speak, however, of the aspect of the present; and I unhesitatingly say that it holds forth no inducement for commercial enterprise. Central Africa is doubt-

less ready enough to take whatever England likes to send in calicoes or beads, but she has nothing to give in return.

I have mentioned that ivory was the only article of commerce brought down from the interior, and a few words on that subject will perhaps not be amiss. People talk as if the ivory of Africa were inexhaustible. It is commonly supposed that, if European traders could but establish themselves in the interior, fortunes could be made. Nothing could be more absurd. Let me simply mention a fact. In my sojourn of fourteen months, during which I passed over an immense area of the Great Lakes region, *I never once saw a single elephant.* Twenty years ago they roamed over those countries unmolested, and now they have been almost utterly exterminated. Less than ten years ago Livingstone spoke about the abundance of elephants at the south end of Tanganyika—how they came about his camp, or entered the villages with impunity. Not one is now to be found. The ruthless work of destruction has gone on with frightful rapidity. There are few corners of Africa where they have not been harried out. Even Cameron admits this, and says that the trade will not last many years.

It may be said that the ivory trade shows very little signs of falling off. That is so far true; but the fact can be easily explained, and the reason only shows how speedily the collapse of the trade will finally come. Each year the Arabs have to extend

the area of their operations. Up to the present time they have been able to resort to new fields, hitherto not molested, and thus the trade has been kept up to a certain pitch. But few such fresh areas now exist. The traders from East Africa have overrun the country till they have met those from the Cape, the Zambesi, and Benguela. They have joined hands with those from Loanda and the Congo, and interchanged courtesies with traders from North Africa and the Nile region. Not one great area can now be pointed out where the elephant can be said to roam unmolested. The ivory trade has certainly reached its turning-point. Each year less ivory will be got, and the date is not far distant when hardly a tusk will find its way to the coast.

Formerly the difficulty which obstructed the opening up of Central Africa was the slave-trade. That is practically disposed of. We have now to face a greater obstruction, viz. the absence of any article of commerce which might induce people to settle in the country and develope such resources as it possesses. Philanthropists will doubtless be found who, from unselfish motives, will do their best to advance the civilization of African natives. But in the absence of trade, it must be admitted that the good work will proceed at a much slower rate. It seems very clear that the country will be left almost entirely to missionaries, as the world will be pretty well stocked before the tide of emigration is tempted to set in towards East Central Africa.

Closely connected with the subject of trade is that of transport. While the imagination of various enthusiasts ran riot in picturing the measureless material wealth of the African interior, this question of transport was of course one of paramount importance. Clearly the native porter system was utterly inadequate for an enlarged trade, and hopelessly expensive, and the realization of their dreams could not take place till a new and better order of things had been developed. Missionaries, travellers, geographers, and philanthropists have tried one scheme after another. Almost every known mode of transport has been resorted to. Donkeys, bullocks, mules, camels, horses, have all had their turn in the interesting experiment, and all have failed completely. Mysterious diseases, the tsetse fly, or climatic causes, have proved insuperable obstacles, and rendered every attempt abortive.

Many people have proved with most convincing logical power that a railway is the proper means to open up the country. They have sketched with a daring hand a few thousand miles of the iron road, connecting the coast with the various great lakes; bringing untold wealth to Britain, and taking unlimited quantities of its "Brummagem" wares and flimsy adulterated cottons instead. To make the picture complete, they have told us to expect, as an important result, the stoppage of wars and of the slave-trade—industrious and contented tribes taking to civilized ways, and shouting unanimously for mis-

sionaries to come over and help them. The utter absurdity of such brilliant schemes will require no further proof than the remarks I have made upon the hopeless prospect of developing any trade in the interior for several generations to come.

Still, apart from the commercial aspect of the subject, the transportation of goods is one which is of great interest to missionaries and travellers. The present system of porterage is clumsy, and expensive in the extreme, and every year it seems to get more so.

The latest attempt to overcome the difficulty has shared the fate of all preceding efforts. I refer to the Belgian Elephant Expedition under Captain Carter, the disastrous ending of which we have noticed in the last chapter. It was thought that because Africa was the home of the elephant, it would therefore be admirably adapted for the work, and unaffected by climatic or other causes, just as the Indian elephant is in its own country. Many things, however, were left out of sight. India is a densely-peopled and settled place, and suitable food is both cheap and abundant, so that at every stage it is to be had in any desired quantity. In Africa the contrary is the case. It is most remarkably thinly peopled, and considerable stretches everywhere occur quite uninhabited. It is by no means settled; and food is both very dear and very scarce. In passing, say, from Mpwapwa to Ugogo it would be quite impossible to get proper quantities of food. For several

marches, such as in the Marenga-Mkhali, and the Mgunda-Mkhali, no suitable sustenance could be obtained, as these are both wretched deserts, and the torture the animals would endure from want of water would be exceedingly great. That these difficulties are not merely theoretical, has been amply proved by the fate which befell Carter's elephants. They all perished except one, *which never carried any load.*

It may be urged that African elephants roam over these very areas. This is true. Traditions are extant of their having been seen. But it must be remembered that the wild elephant has an immense advantage over its tamed brother, and lives under really quite different conditions.

There is also another aspect in which the affair may be viewed. Consider the position in which a caravan would be placed if one of the elephants forming it was to die. There would not only be the loss of a very valuable animal, but the caravan would be quite paralyzed, and unable to proceed without leaving the load behind. It will thus be seen that by the loss of an elephant an important expedition would be more liable to be brought to a disastrous conclusion than by the possible desertion of porters. In any case it would probably be found in the end that the elephant is both a much slower and a much more expensive means of transport than even the native porter.

In some possible future, African elephants may be used as regular transport animals. But before that

dream is realized there must be a larger and more settled population, and fixed daily stations, where plenty of proper food can be obtained. Till then, the attempt must be voted premature.

But though so many efforts have hitherto failed, I do not think that the solution of the problem is quite hopeless. It seems to me that the country between Mpwapwa and Ugogo is eminently suited to the camel. In every respect that district agrees with the countries in the north of Africa, where the camel is such a boon in the pathless and waterless deserts. From the coast to Mpwapwa that useful animal does not appear to thrive, for a variety of reasons not yet properly studied; but through Ugogo—the most difficult and trying part—everything seems to favour the practicability of using it. I would recommend this scheme to the careful consideration of the London Missionary Society, as they are most interested at present in having cheaper and more rapid communication with their stations on Tanganyika. It may share the fate of similar attempts, yet it is worth trying, and one or two animals would not be very expensive.

A few words on the subject of roads, and I have done. The reader will already be able to draw his own conclusion from the above facts, as to the usefulness of roads *from a commercial point of view*.

Before a road can be of the slightest use commercially in East Central Africa, two questions have to be settled. First, what is there of value to bring

along the roads? And, second, what better means of transport is there than that of the native porter? We have already concluded that there is nothing at present known worth bringing down, except ivory, which will soon be exhausted; and we have also clearly shown that no better means of transport has yet been found than the native porter. A road is of not the slightest value to a porter, as the ordinary native pathway serves all his purposes as effectually as any fine road that can be made. Clearly then, road-making for transport purposes is premature in East Africa, and of no value from a business point of view. This has been forcibly illustrated in the case of the road from Dar-es-Salaam, through a part of Uzaramo.

But though roads present no commercial prospects, philanthropists need not despair; for there can be little doubt that though a road will never pay its promoters in cash, yet the influence which the formation of it will exercise upon the natives, is productive of advantages by no means inconsiderable. The Dar-es-Salaam road is a capital instance in point. The beneficial social effects which the construction of it has had upon the neighbouring natives is very marked indeed. Dr. Kirk, who has recently visited it, has expressed himself greatly astonished at the revolution it has occasioned. It has produced greater peace and security, developed more steady and industrious habits, and otherwise given a distinct impetus to material advancement and helped on the work of civilization.

APPENDIX I.

NOTE ON MR. J. THOMSON'S CENTRAL AFRICAN COLLECTION.

By J. G. Baker, F.R.S.

The collection contains altogether nearly 200 species. Amongst the plants from an elevation of 6000 to 8000 feet are a certain number of characteristically Cape types. Amongst these are *Dierama* (Sparaxis) *pendula*, a common Cape plant long known in English gardens; *Buphane toxicaria*, the well-known "poison-bulb" of Natal and the Transvaal, which was found also by Captain Cameron on the shores of Lake Tanganyika, and by Welwitsch in Angola; *Silene Burchellii*, *Clematis Thunbergii*, *Hypoxis villosa* and *obtusa*, *Berkheya Zeyheri*, *Dombeya Burgessiæ* and *Plectronia Gueinzii* of Natal, *Asclepis capensis*, and *Alepidea anatymbica*. There are a considerable number of characteristically Cape genera, of which one or more species, not identical with those of the Cape, are found in Abyssinia or other regions of Central Africa. These are represented in Mr. Thomson's collection by a *Protea*, probably conspecific with *abyssinica*, a *Pelargonium*, two species of *Selago*, *Moræa diversifolia*, *Felicia abyssinica* and a second species, three species of *Helichrysum*, *Lightfootia abyssinica*, and a second species apparently new, two *Gnidias*, a *Clutia*, *Rhus glaucescens*, two *Disas*, and a new *Gladiolus* of the section *Hebea*. Of widely-spread temperate types we have *Scabiosa Columbaria*, a common British plant, a *Cerastium*, a *Hypericum*, *Solanum nigrum*, a *Lotus*, and a *Calamintha*. *Agauria salicifolia* and *Geranium simense*, both of which Mr. Thomson has gathered, are common to the Cameroons and the mountains

of Abyssinia and Madagascar. *Caucalis melanantha* is common to the mountains of Abyssinia and Madagascar, and *Rumex, maderensis*, which was also gathered by Speke and Grant, is a plant of the Atlantic Islands. The greater proportion of the collection from the lower levels consists of species of widely-spread tropical and subtemperate genera, some of which are confined to the old world, whilst others belt the whole globe in the warmer zones. To this class belong a new tree-fern of the genus *Cyathea* (*C. Thomsoni*, Baker, MSS.), a new scapigerous *Torenia* near *T. Schweinfurthii*, a new *Tecoma* (*T. Nyassæ*, Oliver, in Hook's Icones, t. 1351), *Margaretta rosea*, the only known species of a genus discovered by Colonel Grant, and named after Mrs. Grant, *Euphorbia Grantii* (Oliver), a curious broad-leaved species with very large hand-like glands to the involucre, *Pavonia Schimperiana*, a *Mimulopsis*, a *Burmannia* an *Eriocaulon*, a *Triumfetta*, two *Ochnas*, a *Crotalaria*, four *Indigoferas*, a *Tephrosia*, a *Smithia*, a *Cassia*, a *Combretum*, a very fine *Loranthus*, with broad leaves and tubular flowers densely clothed with yellow hairs, a *Spermacoce*, eleven *Vernonias*, three *Buchneras*, five *Ipomœas*, an *Acalypha*, three *Ocymums*, and three species of *Plectranthus*. Universally diffused tropical species are represented in the collection by *Dodonæa viscosa* and *Bidens pilosa*. The specimens are deposited in the herbarium of the Royal Gardens at Kew, and have nearly all been examined and determined by Professor Oliver.

APPENDIX II.

REMARKS ON THE SHELLS FROM LAKES TANGANYIKA AND NYASSA AND OTHER LOCALITIES BETWEEN THE LATTER AND DAR-ES-SALAAM.

By EDGAR A. SMITH, F.Z.S., British Museum.

THE collection of shells brought home by Mr. Thomson is one of the most remarkable additions to the conchological fauna of Central Africa that has ever been made. Our knowledge of the shells of Lake Tanganyika until quite recently was most scanty, only four species being known, which were brought to this country by Captain Speke some twenty years since. Mr. Edward Coode Hore, of the London Missionary Society's Tanganyika Mission, was the next to contribute to the list of remarkable forms of shells which are now known to inhabit the lake.

From Mr. Thomson's observations respecting the geology of the district, he concludes that in the past Tanganyika has been an inland sea, whose waters have gradually freshened. This conclusion is quite borne out by the character of several of the shells, which have all the appearance of being modified marine forms. Of these I would call special attention to a species which I have designated *Limnotrochus Thomsoni* (Thomson's lake-Trochus). Here is a shell which, on first beholding, I could scarcely believe to be an inhabitant of fresh water, for a more exact mimic of a marine Trochus could not be found. However, on close examination of the characters afforded by the aperture, the difference of the operculum and the non-nacreous interior, it is seen to belong to quite a distinct group.

Another most wonderfully pseudo-marine species is what I

have named *Syrnolopsis lacustris*, on accouut of its great imilarity to a marine genus called *Syrnola;* but, as in the previous instance, so here certain modifications are present which well distinguish the two forms, but it is easy to believe that they may have had a common progenitor.

Other examples of marine-like species are *Lithoglyphus rufofilosus*, *L. neritinoides*, and *Melania nassa*, the two first being new to science, and the latter one of Captain Speke's discoveries. Altogether thirty species are now known to inhabit the lake, of which seventeen are restricted to it, the remainder being chiefly nilotic forms. Of the species peculiar to it I must mention the *Tiphobia horei*, perhaps the most charming and remarkable of the immense family of molluscs called *Melaniidæ*. This was the grandest of Mr. Hore's discoveries; but the specimens he sent to this country lacked the operculum, an important feature in determining the classification of many shells. This want was however supplied in a specimen presented to Mr. Thomson by Mr. Hore, and in another instance also, namely that of *Neothauma tanganyicense*.

The shells of Lake Nyassa are of a less strange character, and do not include a single genus which is not represented in other waters. Some of the twenty-seven known species, as might be expected, are apparently peculiar to it, and one of these (*Ampullaria gradata*), obtained by Mr. Thomson, is not only specifically new to the lake, but also generically.

Several very interesting land shells were collected by Mr. Thomson whilst on the march between Nyassa and the coast, and one of these is specially worthy of note, for in *Bulimus notabilis* we have a snail quite distinct from any other previously known from Africa. Another fine species (*Achatina Thomsoni*) is especially charming for its vivid zebroid markings and the beautifully sculptured epidermis, presenting the appearance of a delicately woven fabric.

In conclusion, I feel bound to bear testimony to the admirable manner in which the specimens have been preserved by Mr. Thomson, to whom the greatest praise is due in contributing such a fine addition to our knowledge of the conchological fauna of East and Central Africa.

The following is a complete list of the shells of his collection:*—

	Localities.
1. Cyclophorus wahlbergi, *Benson.*	Between.**
2. Cyclostoma insulare, *Pfeiffer*—variety.	„
†3. Helix nyassana, *Smith.*	„
4. „ mozambicensis, *Pfeiffer*—var.	„
5. „ jenynsi, *Pfeiffer.*	„
†6. Streptaxis gigas, *Smith.*	„
†7. „ mozambicensis, *Smith.*	„
8. Ennea obesa, *Gibbons.*	„
9. „ lævigata, *Dohrn.*	„
10. Bulimus Braunsii, *Martens.*	„
†11. „ notabilis, *Smith.*	„
†12. Achatina Thomsoni, *Smith.*	„
13. „ Caillaudi, *Pfeiffer.*	Near Tanganyika.
14. „ rectistrigata, *Smith.*	„
†15 Subulina lenta, *Smith.*	„
†16 „ solidiuscula, *Smith.*	„
‡17. Limnotrochus Thomsoni, *Smith.*	Tanganyika.
18. Lithoglyphus zonatus, *Woodward.*	„
†19. „ neritinoides, *Smith.*	„
†20. „ rufofilosus, *Smith.*	„
‡21. Syrnolopsis lacustris, *Smith.*	„
†22. Ampullaria gradata, *Smith.*	Nyassa.
23. Lanistes purpureus, *Jonas.*	„
24. „ affinis, *Smith.*	„
25. „ sp. junior.	Tanganyika.
26. Melania tuberculata, *Müller.*	„
†27. „ tanganyicensis, *Smith.*	„
28. „ nassa, *Woodward.*	„

* A detailed account, with descriptions and coloured figures, is now in the press, and will be published in the "Proceedings of the Zoological Society," 1881.

** This abbreviation signifies between Lake Nyassa and the East Coast.

† Species marked with a dagger are new to science.

‡ These are new both generically and specifically.

		Localities.
29.	Tiphobia Horei, *Smith.*	Tanganyika.
30.	Neothauma tanganyicense, *Smith.*	„
31.	Paludina capillata, *Frauenfeld.*	Nyassa.
32.	„ Robertsoni, *Frauenfeld.*	„
33.	Paludomus ferruginea, *Lea.*	Between.
34.	Planorbis sudanicus, *Martens.*	Tanganyika.
35.	Segmentina (Planorbula) Alexandrina, *Ehrenberg*—var. tanganyicensis	„
36.	Limnæa natalensis, *Krauss.*	„
37.	Physa sp. junior.	„
38.	Cyrena (Corbicula) radiata, *Parreyss*—var.?	„
39.	Pleiodon Spekei, *Woodward.*	„
40.	Mutela exotica, *Lamarck.*	„
41.	Spatha tanganyicensis, *Smith.*	„
42.	Unio niloticus, *Cailland.*	„
43.	„ Burtoni, *Woodward.*	„
44.	„ nyassaensis, *Lea*—var.	„
45.	„ tanganyicensis, *Smith.*	„
†46.	„ Thomsoni, *Smith.*	„
†47.	„ Horei, *Smith.*	„

† Species marked with a dagger are new to science.

APPENDIX III.

NOTES ON THE GEOLOGY OF EAST CENTRAL AFRICA.

THOUGH many travellers have now penetrated East Central Africa, and laid bare its chief geographical facts, no attempt as yet has been made to throw any accurate or reliable light upon its geological formation. My original inducement for joining the Society's Expedition was the hope that I might do some good work in that direction. The science of geology had always been my special hobby, and I had studied the subject with some degree of success under one of its most efficient and enthusiastic professors—Geikie, at the University of Edinburgh. Fresh from the fire of his influence, and full of the sanguine hopefulness of youth, I thought that here was a grand field in which to apply my newly acquired knowledge, and in which to test theory by independent practical experience.

Many things, however, conspired to prevent the full carrying out of my cherished wishes. The leader of the expedition died. The gigantic task of leading a large caravan fell to my lot, and the more immediate geographical objects of the expedition had to be attended to. In the spare moments thus left to me I could give only the most cursory and imperfect attention to the geological researches which I had marked out for myself. It was impossible while on the march to leave the path to examine this rock or that section; and after the day's toil there was little time left me to follow out my favourite study. Other difficulties also came in the way. The vegetation was commonly of such a nature as to leave few rocks exposed; and in the glens and ravines, where sections were most to be ex-

pected, plant life was more than usually abundant, and defied the prying eye.

Notwithstanding these difficulties, however, the traveller with a fair notion of the subject cannot fail to obtain glimpses into the geological structure of the country over which he is passing sufficient to warrant him in drawing some general conclusions. From such passing insight then as I obtained during my journey in the Lake Region, I have had the boldness to draw out a geological map and diagram of that country. Of course I simply send them forth as a foreshadowing of the principal geological features, and not as reliable guides in matters of detail, my argument being that outlines even though hazy and indistinct are better than an utter blank.

Without further apology, I will now say a few words about the different rocks and formations observed.

Proceeding from the coast inland, the first thing we are called upon to notice is the Coast Tertiary Deposits. These consist of—(1) Brick-red Sands or Clays, or mixtures of both in variable proportions; (2) Coral Rocks or fragments of the same; and (3) Sandstones with numerous shells.

The first extend over the length and breadth of the low-lying country which borders the kingdom of Zanzibar, between the base of the Plateau and the Indian Ocean. They have been derived from the metamorphic rocks of the coast mountains. These are rich in minerals containing much iron—hence the red colour. These sands and clays are of importance principally as forming the deposit from which is extracted the valuable semi-fossil gum named copal, which has already been alluded to as one of the principal articles of trade from the East Coast. Some climatic change would appear to have come over the country since the copal was buried in the ground, as the tree which produces the gum is now practically extinct, being rarely seen, and almost never in clumps. It seems to have been a sea-loving plant, as no specimen of the gum has yet been found in the interior.

The coral rock is not found any distance inland. It only occupies a very narrow strip along the coast. This doubtless arises from the fact that the conditions of growth could not be

attained except at some distance from the shore, where water, uncontaminated by the alluvium from the land, would permit of the coral animal living vigorously to build up its wondrous structure.

The sandstone is found at but few places on the Coast, and that to a very small extent. It is seen on the shores of the island of Zanzibar, near the entrance to Dar-es-Salaam harbour, and at Pangani. At both places it is used as building material.

These three deposits appear to belong to the later part of the Tertiary period, though their exact position cannot be properly fixed. They have, however, existed long enough to be raised to a height of between 100 and 200 feet by the gradual upheaval of the continent; an upheaval which has been marked by two pauses, forming as many raised beaches, which I have already described. The red sands have been sufficiently long above water to allow of the lengthened existence of gum-copal tree forests, and their almost complete extinction; though it must be remembered that of the numerous insects found imprisoned in the fossil gum, none are at present extinct.

As we near the base of the Interior Plateau, we come upon a class of rocks of a completely different character from those we have just described, and cut off from them by a wide gap in the geological series. These are Red Calciferous Sandstones, shales, pebbled beds, occasional limestone strata, and even coal-deposits. They stretch from near the Equator to south of the Rovuma, and probably even to the Cape, in a narrow but unbroken line. From the comparative absence of fossils it becomes somewhat difficult to fix their geological age; but sufficient evidence has been found to warrant them being placed if not in the carboniferous period, at least in immediate proximity to it. At Umba, in Usambara, I found one bed of limestone, with numerous fossils of characteristic carboniferous types; and another between the coast mountains and Simbaweni. Thornton found calamites near Mombas, and expresses his belief that the rocks were identical with those found on the Zambesi. On the Rovuma, coal has been discovered by Livingstone, in exactly similar conditions to the Zambesi coal. With these facts before us, we need hardly hesitate in ascribing these rocks to the carboniferous system.

The general strike of these sandstones is N. and S., parallel with the coast mountains; and the dip to the east. The dip is very variable, extending from a few degrees to 90°, though as a rule the amount is small. Where it is great, as in some parts of Khutu and the Rufiji valley, it has been produced by the intrusion of basalts, which have tilted the beds. This eruption in Khutu appears to have occurred during carboniferous times, as we find rocks of the same period lying unconformably upon the tilted beds.

Near Behobeho we find evidence of contemporaneous volcanic outbursts, forming intercalated beds of lava, as we have noticed already in describing the peculiar structure of Mount Johnston, near Behobeho.

The carboniferous rocks of East Central Africa in no case rise above 1000 feet, and everything seems to point to the fact that the continent has retained almost exactly the same outline from a period anterior to the carboniferous.

We have now reached the base of the Plateau of Inner Africa, and here we meet with another abrupt change in the rocks coincident with a sudden alteration of the surface features. From the comparatively low-lying coast country to the Plateau and mountains, we pass also from the sandstones, shales, and limestones of carboniferous age, to an immense series of Metamorphic Rocks, of an era greatly more ancient, but of uncertain geological position. The mountains, which are simply the much-cut-up escarpment of the Plateau, consist of schists (which at some places are micaceous, and at others hornblendic) and gneiss—though occasionally the rocks are slightly less changed, and are clay-slates or greywacke. The strike is in the direction of the length of the continent, but the dip is extremely variable and indefinite. In the Mukondokwa valley, between Bagamoyo and Mpwapwa, where the rocks have been but slightly metamorphosed, I discovered some fossiliferous beds which will yet, in all probability, throw a considerable amount of light upon the age of these rocks. Such specimens as I myself picked up were in too bad preservation to allow of their determination, and at that time I was too anxious to reach the coast to delay my march, for the purposes of more

careful search—a fact which has ever since been a matter of regret to me.

The occurrence of schists and gneissic rocks along the edge of the Plateau, and rising to an altitude higher than its general level, seems to have been due to the existence of a line of weakness. This would allow the rocks in its immediate neighbourhood to fold up during the upheaval (caused by the secular loss of heat, and consequent contraction and crumpling of the earth's surface) which raised Africa above the ocean, and which by the intense pressure turned the main mass of the continent into granite.

These metamorphic rocks are usually found in mountain masses and ranges, formed, doubtless to a considerable extent by the folding of the rocks, but more particularly by denudation.

After passing these mountains we reach the Granitic District, distinguished by its surface features of great monotonous plains or rolling ridges and valleys, forming good grazing-ground during the wet season, but burnt up deserts in the dry. In Uhehe and Ubena the soil is red and clayey, while between Mpwapwa and Unyanyembe, sands or grey clay predominate, varying in fact according to the ingredients of the granite. In many places the granite has become decomposed to great depths, forming thick accumulations of clay, while the surface is strewed over with immense blocks, which being less decomposable or more compact, have resisted the weather, and now appear lying about in chaotic confusion, as if thrown up by some great convulsion. They appear in all sorts of fantastic shapes and positions, in huge monoliths, rounded blocks, or as rocking stones.

In many places there is evidence of various eruptions of igneous matter through the granite, and of a vastly later date. These eruptions appear to have occurred in a lineal direction. I observed cases in Ubena and Uhehe, and also in Ugogo. At the head of Lake Nyassa we find an immense development of volcanic rocks. They occur on the Zambesi, and in different parts of Natal and the Cape. To the north there is the volcanic region of Kilimanjaro, and probably Kenia, while Abyssinia presents another instance of similar outbursts. Putting these

facts together, there seems to be ample evidence to show that at some former time a great line of volcanic action extended from the Cape by Nyassa, Ugogo, Kilimanjaro, to Abyssinia, keeping parallel and near to the ocean.

If we now continue on our way to Lake Nyassa, we will find that after crossing the rolling country of Ubena, we suddenly reach the base of what appears to be a range of mountains rising from 2000 to 3000 feet above Ubena. A large stream, called the Mbangala, skirts the bottom, the channel of which exhibits what appears to be a broad dyke of Greenstone running parallel with the mountains. On the Ubena side of this dyke the rocks are granitic; on the Nyassa side they are Clay-Slates with occasional appearances of felspathic rocks. The occurrence of the dyke, the sudden alteration of level, and the change in the geological formation, strongly point to the existence of a fault.

The mountains, moreover, prove to be the edge of a higher tract of land, which I have called the Upper Plateau of Central Africa, and which consists of metamorphic rocks but slightly altered, though schists and gneiss frequently occur. To the north of Nyassa clay-slates predominate, preserving as a rule their original horizontal bedding. The scenery in the region of the clay-slates is characterized by rounded grassy mountains, with smooth precipitous sides, rarely cut or carved into any irregularities, and quite treeless. The very deep and narrow valleys or gorges trend in all directions, the rocks having neither dip nor strike to direct the denudation.

I can offer no theory as to the exact relationship of the clay-slates to the granites. There may be two opinions—either that they are of the same age, or that the clay-slates are of a very much later date, and deposited upon the granites. I am inclined to adopt the latter supposition.

We have now arrived within twenty miles of Nyassa; and round this great lake we find a most extraordinary series of volcanic porphyrites, tuffs, and agglomerates, forming mountain masses 4000 to 5000 feet high. Though presenting this enormous thickness, they appear to extend over a very limited area round the north end of the lake; which would seem to suggest

the notion that these lava and tuff beds are the product of one huge crater, which did not belch forth its lava contents in sufficient volume to flow over any wide area, but simply by continuous small streams and accumulations of ashes and erupted fragments gradually raised this enormous thickness.

The date of this eruption I have no doubt belongs to the later Carboniferous or Permian times, which appear to have been characterized over the whole globe by great volcanic activity. I have already described, in Chapter VII., Vol. I., the occurrence of beautifully preserved volcanic cones or craters in the country of Makula, and spoken of their probably belonging to a much later geological era; I need not therefore repeat what I have there said.

A few words will suffice to indicate the nature of the rocks between Nyassa and Tanganyika. On leaving the low-lying country of Makula, we pass from the volcanic rocks to the Clay-Slates, and thence to Schists and Gneissic rocks of a variable character, which extend to near Lake Tanganyika, and away north through Fipa and around Lake Leopold. Here and there granites are intruded, though not in mass. The exact relationship of the different rocks to each other could not be ascertained in our hasty examination.

Immediately round the south end of Tanganyika we once more return to sandstones, which resemble the calciferous series of the coast in their principal lithological characters, though differing from the latter in being slightly metamorphosed into a species of quartzite. In colour they are reddish and variegated. The stratification is horizontal, but the beds are very much jointed and broken. Where facing the lake, they either present a perfect precipice, or, as is more often the case, there is a steep and rugged talus of boulders and rubbish at the base surmounted by a cliff.

These sandstones form, as it were, a socket in which the lake is set. They come to a very abrupt termination on the western side at the river Lofu, where the level of the Plateau suddenly descends from between 5000 and 6000 feet on the southern side of the river, to a few hundred feet above the level of the lake on the northern side. Coincident with this fall in

altitude we find a change in the rock formation. The sandstones give place to felspathic rocks, and by the manner in which the sandstones are smashed and tilted along the line of contact, it is very clear that there has been either a great fault formed here, or the felspathic rocks have been forced to the surface.

An examination of the district points to the probability of the latter conclusion being correct. A great mass or boss of rock, extending 7° 8′ lat. to 8° 30′, has evidently risen up through the crust of the earth. It is found on both sides of the lake, as indicated on the map, which would show that it had been intruded previous to the formation of the present Lake Tanganyika, and subsequently fractured into two halves.

The alteration of the sandstones at the south end of the lake into quartzites is probably due to the convulsion which originated the felspathic boss.

North of Mpala, on the western side of the lake we again come upon another area of Sandstones, which, however, differ from those we have mentioned in being unmetamorphosed. They consist of exceedingly friable sandstones of a deep red hue with pebbled beds. On the eastern side of the lake, and on the Lukuga, shales are common. As a rule these beds present little evidence of ever having been much disturbed. At some places on the eastern side, however, they have been considerably curved and bent. I have not seen in limestone beds any fossils by which the position of these rocks might be approximately determined. They occupy a very wide area—covering the greater part of Kawendi, Uvinza, Ujiji, Uguha, Urua, and probably almost the whole valley of the Congo, extending round by Lake Moero and Itawa to Ulungu. In Urua I found them lying upon granite, which is exposed in many places by the washing away of the sandstones.

It has been suggested by a distinguished geologist, that they have probably been deposited along a river valley. I do not think that such a theory meets the circumstances of the case. In my opinion, they have been formed in a great inland sea, which must have included the entire Congo region, from Tanganyika to the western coast mountains. Probably this

great basin had been a hollow in the bed of the sea, which remained as a great salt lake on the upheaval of the continent. That it was originally salt seems to be shown by the fact that many of the shells of Lake Tanganyika (which would be a part of this great lake), are of a markedly marine type. For evidence of this I would refer the reader to Mr. Smith's notes on my collection of shells.

The disappearance of this saline basin is no doubt due either to the cutting of a channel through the western coast barriers by some river such as the Congo, or the more speedy method of a great fracture, as in the case of the Zambesi.

Lake Nyassa seems to have had no connexion with this great lake, as it presents a conchological fauna quite distinct from that of Tanganyika. I think, however, it will be found that Lakes Moero and Bangweolo will on investigation show some affinity in their watery inhabitants. Apart from this supposed lake, however, the basin of Tanganyika clearly has had a secondary origin, by the formation of a great fault or narrow depression of great though unknown depth.

These questions of course require to be approached with caution in the present meagre state of our knowledge. I throw them out more as hints to direct future investigation.

APPENDIX IV.

ALTITUDES IN EAST CENTRAL AFRICA BETWEEN PONGWE AND MAKALUMBI, FROM 317 OBSERVATIONS TAKEN DURING THE EAST AFRICAN EXPEDITION.

By JOSEPH THOMSON, and computed by LIEUT. SUGDEN, R.N.

THE following heights have been computed by BAILY'S FORMULÆ, and are above the sea-level :—

Date.	Place.	Barometer Readings.	Thermometer.	Height with the 1st Kew correction, 1878. Eng. feet.	Height with the 2nd Kew correction, 1880. Eng. feet.	Height from the Mean of Observations with the 1st correction.	Height from the Mean of Observations with the 2nd correction.	Reference Number.
1879.								
May			Degs.					
19	Pongwe	29·75	80	45	2	...	...	1
21	Tambani... ...	29·85	82	234	234	...	...	2
22	Mzugu	29·75	...	333	333	...	...	3
23	Mkunganga ...	29·72	85	355	355	...	...	4
23	,, ...	29·74	85	335	335	345	345	5
24	Liwela	29·80	...	...	...	...	...	6
25	,, ...	29·76	...	...	...	...	...	7
26	Kikonga... ...	29·55	...	...	...	...	...	8
29	Mkamba... ...	29·77	74·5	306	306	...	...	9
29	,, ...	29·70	78	376	376	...	...	10
29	,, ...	29·70	73·5	371	371	...	...	11
30	,, ...	29·70	75	376	376	373	373	12
June								
2	Madodo	29·71	77	373	373	...	...	13
3	Kifuru	29·74	78	317	317	...	...	14
6	Msangapwani ...	29·80	77	284	285	...	...	15
6	,, ...	29·73	77	353	353	318	319	16
30	Behobeho ...	29·70	80	387	387	...	...	17
July								
1	,, ...	29·70	74	378	378	382	382	18

Date.	Place.	Barometer Readings.	Thermometer.	Height with the 1st Kew correction, 1878. Eng. feet.	Height with the 2nd Kew correction, 1880. Eng. feet.	Height from the Mean of Observations with the 1st correction.	Height from the Mean of Observations with the 2nd correction.	Reference Number.
1879.								
July			Degs.					
2	Desert	29·45	84	588	617	...	...	19
4	Mua	29·50	68	533	552	...	...	20
4	,, ...	29·50	75	557	577	...	...	21
4	,, ...	29·45	82	602	622	564	583	22
5	Mwigongwa ...	29·50	85	545	565	...	...	23
6	Padzi	29·50	80	557	577	...	...	24
6	,, ...	29·40	81	654	675	605	626	25
7	Kirengwe ...	29·30	95	712	743	...	...	26
8	,, ...	29·40	70	639	643	...	...	27
8	,, ...	29·30	85	734	764	...	...	28
8	,, ...	29·30	88	727	757	...	...	29
9	,, ...	29·50	69	536	556	...	...	30
9	,, ...	29·40	84	647	669	...	...	31
9	,, ...	29·35	88	677	707	...	...	32
10	,, ...	29·40	66	624	644	...	...	33
10	,, ...	29·40	...	640	661	...	...	34
10	,, ...	29·30	88	727	758	666	690	35
12	Mgunda	28·75	82	1272	1333	...	...	36
13	,, ...	28·90	67	1089	1186	...	...	37
13	,, ...	28·90	78	1126	1186	...	...	38
14	,, ...	28·90	67	1229	1292	...	...	39
14	,, ...	28·90	67	1089	1154	...	...	40
14	,, ...	28·90	75	1121	1182	...	...	41
14	,, ...	28·85	78	1179	1229	...	...	42
15	,, ...	28·90	64	1078	1128	...	...	43
15	,, ...	28·90	75	1121	1182	...	...	44
15	,, ...	28·80	78	1229	1292	...	...	45
16	,, ...	28·85	64	1128	1178	...	...	46
16	,, ...	28·80	73	1214	1264	...	...	47
16	,, ...	28·80	74	1218	1268	1161	1218	48
18	Viaya	28·90	79	1126	1176	...	...	49
19	Jungle	28·92	80	1105	1155	...	...	50
20	Ruaha	28·28	82	1752	1845	...	...	51
21	,, ...	29·10	85	914	964	...	...	52
22	,, ...	29·05	85	964	1016	...	...	53
23	Joto	29·10	85	914	964	...	...	54
23	,, ...	29·05	76	976	1028	915	905	55
24	Pangalala ...	29·20	80	846	875	...	...	56
24	,, ...	29·15	87	880	911	...	...	57
25	,, ...	29·25	69	772	801	...	...	58
25	,, ...	29·25	86	782	812	...	...	59
25	,, ...	29·20	82	840	870	800	854	60
26	Majuruka ...	29·20	81	842	872	...	...	61
27	Mkomokero ...	29·20	79	825	854	...	...	62
27	,, ...	29·15	79	896	920	...	...	63
27	,, ...	29·30	67	715	745	...	...	64
28	,, ...	29·30	75	744	774	...	...	65
28	,, ...	29·20	85	834	864	...	...	66
28	,, ...	29·30	82	740	770	...	...	67
29	,, ...	29·30	76	748	778	...	...	68
29	,, ...	29·30	78	749	779	...	...	69
29	,, ...	29·20	71	828	858	...	...	70
29	,, ...	29·20	78	849	879	...	...	71
30	,, ...	29·35	65	659	689	...	...	72

Date.	Place.	Barometer Readings.	Thermometer.	Height with the 1st Kew correction, 1879. Eng. feet.	Height with the 2nd Kew correction, 1880. Eng. feet.	Height from the Mean of Observations with the 1st correction.	Height from the Mean of Observations with the 2nd correction.	Reference Number.
1879.			Degrs.					
July 30	Mkomokero ...	29·30	69	722	752	...	...	73
30	,, ...	29·30	79	746	776	...	...	74
30	,, ...	29·30	82	741	771	...	...	75
30	,, ...	29·30	77	751	780	...	...	76
30	,, ...	29·30	70	724	754	...	...	77
31	,, ...	29·30	71	729	759	...	...	78
31	,, ...	29·35	71	681	710	...	...	79
31	,, ...	29·18	83	848	888	...	...	80
31	,, ...	29·20	77	840	870	768	798	81
Aug. 1	Gambula... ...	29·20	85	824	864	...	...	82
1	,, ...	29·15	83	879	918	...	...	83
1	,, ...	29·20	80	846	874	849	885	84
3	Paliogoalina ...	29·30	78	749	779	...	...	85
3	,, ...	29·30	82	830	870	...	...	86
3	,, ...	29·20	79	836	876	...	...	87
3	,, ...	29·30	72	733	763	...	...	88
3	,, ...	29·32	68	699	729	...	...	89
3	,, ...	29·20	66	799	839	...	...	90
3	,, ...	29·25	62	737	775	703	829	91
4	Pakochewa ...	29·30	86	732	762	...	...	92
4	,, ...	29·18	88	838	878	...	...	93
4	,, ...	29·10	80	924	974	...	...	94
4	,, ...	29·20	63	789	828	...	...	95
5	,, ...	29·20	64	793	832	...	...	96
5	,, ...	29·10	80	924	974	...	...	97
5	,, ...	29·10	78	928	978	847	880	98
6	Luipa River ...	29·20	67	804	843	...	...	99
6	,, ...	29·10	84	917	967	...	...	100
6	,, ...	29·10	79	926	976	...	...	101
7	,, ...	29·30	60	690	720	882	928	*102
7	Mmatanga ...	29·00	82	1028	1079	...	...	103
7	,, ...	28·90	87	1119	1171	...	...	104
7	,, ...	28·95	79	1084	1134	...	...	105
7	,, ...	29·00	65	979	1028	1052	1103	106
8	1st Camp ...	28·75	87	1272	1346	...	...	107
8	,, ...	28·75	84	1269	1349	1270	1347	108
9	2nd Camp ...	28·45	79	1591	1672	...	...	109
10	3rd Camp ...	25·95	75	4236	4414	...	...	110
10	,, ...	25·95	68	4186	4353	...	...	111
10	,, ...	25·95	64	4158	4324	...	...	112
10	,, ...	25·95	66	4172	4339	4188	4357	113
11	4th Camp ...	25·75	69	4316	4650	...	...	114
11	,, ...	25·70	64	4435	4625	4425	4637	115
12	5th Camp ...	25·70	60	4405	4595	...	...	116
12	,, ...	25·20	66	5014	6046	4709	5320	117
13	6th Camp ...	25·25	71	4996	6214	...	...	118
13	,, ...	25·20	71	5053	6485	...	...	119
13	,, ...	25·20	64	4998	5215	...	...	120
14	,, ...	25·20	55	4926	5141	...	...	121
14	,, ...	25·20	67	5021	5239	...	...	122

* Luipa River and 8th Camp. The observations taken at 6 a.m., numbers 102 and 130, differ so much from the others that they have not been included in the mean.

Date.	Place.	Barometer Readings.	Thermometer.	Height with the 1st Kew correction, 1878. Eng. feet.	Height with the 2nd Kew correction, 1880. Eng. feet.	Height from the Mean of Observations with the 1st correction.	Height from the Mean of Observations with the 2nd correction.	Reference Number.
1879.								
Aug.			Degs.					
14	6th Camp ...	25·20	65	5005	5222	...	...	123
15	,, ...	25·20	55	4926	5141	4989	5379	124
15	7th Camp ...	24·90	66	5357	5601	...	...	125
15	,, ...	24·85	72	5166	5609	...	...	126
16	,, ...	24·80	56	5399	5630	5407	5643	127
16	8th Camp ...	24·55	67	5807	6042	...	...	128
16	,, ...	24·55	67	5807	6042	...	...	129
16	,, ...	24·55	57	5719	5952	5807	6442	*130
17	9th Camp ...	24·00	67	6482	6723	...	...	131
17	,, ...	23·90	65	6583	6825	...	...	132
17	,, ...	23·90	61	6545	6785	6536	6777	133
18	10th Camp ...	24·00	70	6511	6753	...	...	134
19	,, ...	24·00	63	6350	6589	6430	6670	135
19	Mwhana ...	24·40	72	6029	6240	...	...	136
20	,, ...	24·40	50	5832	6064	...	...	137
20	,, ...	24·40	73	6037	6275	...	...	138
20	,, ...	24·35	77	6133	6373	...	...	139
21	,, ...	24·40	57	5894	6120	5985	6216	140
21	Mukasanga ...	24·50	71	5901	6138	...	...	141
21	,, ...	24·40	70	6010	6248	...	...	142
21	,, ...	24·50	67	5866	6102	...	...	143
23	,, ...	24·40	50	5832	6064	5902	6138	114
23	Misimiki...	24·35	72	6087	6338	...	...	115
23	,, ...	24·16	57	5821	6058	...	...	146
24	,, ...	24·33	55	5958	6205	...	...	147
24	,, ...	24·40	57	5894	6129	...	...	148
24	,, ...	24·48	72	5936	6171	...	...	149
24	,, ...	24·30	62	6221	6474	...	...	150
25	,, ...	24·30	50	5948	6193	...	...	151
25	,, ...	24·38	61	5991	6240	...	...	152
25	,, ...	24·30	82	6221	6474	...	...	153
25	,, ...	24·30	67	6102	6351	...	...	154
26	,, ...	24·38	52	5873	6108	...	...	155
26	,, ...	24·30	75	6175	6428	...	...	156
26	,, ...	24·30	54	5984	6230	...	...	157
27	,, ...	24·30	56	6002	6249	6009	6257	158
27	Camp ...	23·90	64	6574	6816	...	...	159
28	,, ...	23·90	54	6478	6717	6526	6761	160
28	,, ...	24·35	64	6015	6252	...	...	161
28	,, ...	24·30	58	6021	6267	6018	6259	162
29	Mkubwasanya ...	24·25	62	6115	6364	...	...	163
29	,, ...	24·25	56	6060	6332	6087	6348	164
31	Masunga ...	25·10	77	5216	5449	...	...	165
31	,, ...	25·15	63	5047	5263	5131	5356	166
Sept.								
1	Kitunda	25·50	89	4799	5008	...	...	167
1	,, ...	25·50	84	4790	4998	...	...	168
1	,, ...	25·45	85	4850	5058	...	...	169
1	,, ...	25·50	68	4691	4895	4782	4989	170
2	Uhenge	25·50	86	4796	5002	...	...	171
2	,, ...	25·50	84	4790	4998	...	...	172
2	,, ...	25·50	75	4744	4950	...	...	173
3	,, ...	25·60	75	4631	4824	...	...	174

* Luipa River and 8th Camp. The observations taken at 6 a.m., numbers 100 and 130, differ so much from the others that they have not been included in the mean.

Date	Place.	Barometer Readings.	Thermometer.	Height with the 1st Kew correction, 1878. Eng feet.	Height with the 2nd Kew correction, 1880. Eng. feet.	Height from the Mean of Observations with the 1st correction.	Height from the Mean of Observations with the 2nd correction.	Reference Number.
1879.								
Sept.			Degs.					
3	Uhenge	25·60	77	4646	4840	...	...	175
3	,, ...	25·60	80	4669	4863	...	...	176
3	,, ...	25·60	81	4785	4992	...	...	177
3	,, ...	25·60	78	4767	4973	...	...	178
3	,, ...	25·50	72	4721	4926	4727	4920	179
9	,, ...	25·57	62	4567	4768	...	...	*180
9	Kabanga ...	25·25	72	5006	5224	...	...	181
10	,, ...	25·30	60	4854	5069	4930	5146	182
10	Kigoma	25·00	86	5376	5610	...	...	183
10	,, ...	25·05	78	5285	5518	...	...	184
10	,, ...	25·05	73	5244	5476	...	...	185
11	,, ...	25·10	60	5081	5310	5248	5478	186
11	Mchikanga ...	24·75	83	5685	5911	...	...	187
11	,, ...	25·70	73	5675	5916	...	...	188
13	,, ...	24·80	60	5436	5679	5599	5835	189
13	Mtengeramemba	24·20	85	6373	6616	...	...	190
13	,, ...	24·20	75	6309	6550	...	...	191
14	,, ...	24·20	65	6217	6456	6299	6540	192
14	Msendiri... ...	23·65	70	6940	7186	...	...	193
15	,, ...	23·65	67	6910	7155	6925	7170	194
15	Mwangwama ...	23·15	70	7557	7809	...	...	195
15	,, ...	23·10	79	7715	7970	...	...	196
15	,, ...	23·10	73	7651	7904	...	...	197
16	,, ...	23·10	52	7429	7677	7588	7840	198
16	Mamalcambula ..	22·65	70	8188	8446	...	...	199
16	,, ...	22·70	65	8069	8324	8127	8385	200
17	Mtandala ...	23·35	73	7340	7589	...	...	201
18	,, ...	23·35	50	7104	7348	...	...	202
18	,, ...	23·40	55	7094	7338	...	...	203
18	,, ...	23·35	74	7350	7599	7222	7468	204
19	Paparua	23·00	72	7767	8020	...	...	205
20	Minyage	23·45	68	7164	7413	...	...	206
21	,, ...	23·45	54	7023	7264	7093	7338	207
21	Paupwe	26·45	90	3175	3306	...	...	208
21	,, ...	26·45	75	3142	3270	...	...	209
22	,, ...	26·35	69	3278	3341	3198	3305	210
22	Pupanganda ...	28·00	88	1634	1687	...	...	211
22	,, ...	28·00	80	1630	1682	1632	1684	212
29	Mbungu	28·00	68	1591	1642	...	...	213
29	Muwijeje... ...	28·00	85	2054	2283	...	...	214
29	,, ...	28·00	83	2056	2265	...	...	215
30	,, ...	28·00	67	1904	2097	2034	2215	216
30	Pokirambo ...	27·70	85	2369	2485	...	...	217
30	,, ...	27·60	80	2477	2598	...	...	218
30	,, ...	27·60	82	2476	2604	...	...	219
30	,, ...	27·60	79	2472	2590	...	...	220
30	,, ...	27·60	77	2461	2599	...	...	221
Oct.								
1	,, ...	27·70	66	2299	2423	2425	2551	222
1	Munduzamba ...	26·45	85	3721	3887	...	...	223
1	,, ...	26·45	84	3721	3887	...	...	224
1	,, ...	26·45	80	3717	3883	...	...	225

* No. 180, taken at 6 a.m., differing so much from the others, has not been included in the mean.

Date.	Place.	Barometer Readings.	Thermometer.	Height with the 1st Kew correction, 1878. Eng. feet.	Height with the 2nd Kew correction, 1880. Eng. feet.	Height from the Mean of Observations with the 1st correction.	Height from the Mean of Observations with the 2nd correction	Reference Number.
1879.								
Oct.			Degs.					
2	Munduzamba ...	26·45	88	3723	3899	3270	3685	226
1	Kwamaboga ...	25·90	78	4315	4562	...	...	227
1	,, ...	25·90	73	4279	4458	...	...	228
3	,, ...	25·90	60	4185	4363	4250	4461	229
4	Papakikwa ...	25·70	62	4421	4612	...	...	230
4	,, ...	25·65	66	4507	4698	...	...	231
4	,, ...	25·65	74	4587	4780	...	...	232
4	,, ...	25·65	75	4574	4767	...	...	233
4	,, ...	25·70	77	4533	4726	...	...	234
4	,, ...	25·80	79	4662	4856	...	...	235
4	,, ...	25·65	87	4624	4820	...	...	236
4	,, ...	25·65	89	4628	4823	4564	4757	237
5	Itchicaria ...	25·50	86	4795	4991	...	...	238
5	,, ...	25·50	81	4788	4981	4790	4986	239
5	Mwisika	24·70	79	5703	5952	...	...	240
5	,, ...	24·70	66	5662	5837	5652	5894	241
7	Pamalila... ...	23·20	...	...	...	...	...	242
7	,, ...	23·20	75	7547	7800	...	...	243
8	Mwizombwe ...	23·15	77	7631	7884	...	...	244
8	,, ...	23·12	70	7657	7910	...	...	245
9	,, ...	23·12	50	7385	7631	7557	7808	246
9	Mtanda	23·45	76	7246	7495	...	...	247
9	,, ...	23·15	67	7154	7402	7209	7448	248
12	Masunda... ...	24·60	56	5615	5883	...	...	*249
12	,, ...	24·60	86	5873	6111	...	...	250
12	,, ...	24·60	86	5872	6111	5873	6111	251
13	Kwachuma ...	24·85	84	5558	5782	...	...	252
13	,, ...	24·90	75	5446	5657	...	...	253
14	,, ...	24·90	62	5338	5546	5448	5661	254
15	Msangwa ...	25·45	82	4848	5010	...	...	255
15	,, ...	25·40	90	4917	5115	...	...	256
15	,, ...	25·40	82	4921	5119	...	...	257
15	,, ...	25·40	82	4901	5098	4896	5093	258
16	Mtinga	25·90	85	4336	4496	...	...	259
17	Mchindi	26·10	85	4115	4284	...	...	260
17	,, ...	26·10	82	4107	4276	...	...	261
18	,, ...	26·10	68	4021	4187	4081	4249	262
18	Top of hill ...	24·58	78	5860	6093	...	...	263
18	Mswilo	24·67	78	5747	5990	...	...	264
21	,, ...	24·80	68	5504	5737	...	...	265
21	,, ...	24·85	70	5463	5696	...	...	266
21	,, ...	24·85	72	5479	5713	...	...	267
21	,, ...	25·85	72	5479	5713	...	...	268
21	,, ...	24·85	78	5530	5760	...	...	269
21	,, ...	24·75	78	5647	5880	5549	5785	270
22	Pamipuria ...	25·20	80	5127	5349	...	...	271
22	,, ...	25·20	78	5111	5332	...	...	272
22	,, ...	25·20	78	5111	5332	...	...	273
22	,, ...	25·20	80	5127	5349	5110	5340	274
23	Mwizombwa ...	25·10	...	...	...	...	...	275
24	Misogwere... ...	24·85	78	5530	5760	...	...	276

* As 249 differs so much from the others it has not been used when taking the mean of the observations.

Date.	Place.	Baro meter Readings.	Thermometer.	Height with the 1st Kew correction, 1878. Eng. feet.	Height with the 2nd Kew correction, 1880. Eng. feet.	Height from the Mean of Observations with the 1st correction.	Height from the Mean of Observations with the 2nd correction.	Reference Number.
1879.			Degs.					
Oct.								
25	Muluchuchu ...	24·40	68	5996	6221	...	...	277
26	,, ...	25·05	60	5138	5367	...	...	278
26	,, ...	25·07	70	5197	5428	...	...	279
26	,, ...	24·95	75	5376	5610	...	...	280
26	,, ...	24·90	80	5477	5711	...	...	281
26	,, ...	24·90	80	5477	5711	...	...	282
26	,, ...	24·90	77	5854	6092	5502	5734	283
27	Machindi	24·60	80	5452	5686	...	...	284
27	,, ...	24·60	75	5310	6046	5631	5866	285
29	Mkolo	24·55	...	...	...	...	...	286
30	Mfambo	24·50	...	...	...	...	...	287
Nov.								
1	Sombe's	24·80	67	5492	5726	...	...	288
1	,, ...	24·75	77	5636	5871	...	...	289
1	,, ...	24·75	72	5593	5834	5573	5810	290
2	Mswilo	25·75	82	4494	4676	...	...	291
2	,, ...	25·70	77	4531	4712	4512	4694	292
4	Kasangolowa ...	26·90	85	2642	2832	...	...	293
5	Pambeto	26·95	83	2630	2790	...	...	294
5	,, ...	26·97	87	2607	2768	2618	2779	295
10	Setche	25·10	77	5216	5449	...	...	296
11	Mkombolo ...	25·10	80	5235	5468	...	...	297
1880.								
Apr.								
18	Kilambo	26·20	80	3443	3563	...	...	298
20	Mtengululu ...	25·20	78	5111	5332	...	...	299
21	Ilimba	25·00	82	5365	5600	...	...	300
22	Inyamwanga ...	24·70	80	5723	5960	...	...	301
23	Makapufi ...	24·40	70	6041	6278	...	...	302
27	Edge of Lake Leopold	23·40	73	7278	7526	...	...	303
30	Pamakuni ...	24·80	75	5563	5798	...	...	304
May								
1	Kitikiri	24·50	78	5951	6190	...	...	305
4	Kwamanda ...	24·50	80	5964	6203	...	...	306
7	Makenda... ...	26·70	85	2896	3048	...	...	307
1879.								
Aug.								
20	Mwhana	24·40	73	6037	6278	...	...	308
29	Mkubwasanga ...	24·25	64	6149	6363	...	...	309
Sept.								
13	Mtengeramemba	24·20	85	6373	6592	...	...	310
Oct.								
3	Papakikwa ...	25·70	79	3986	4099	...	...	311
11	Masunga ...	24·60	86	5872	6111	...	...	312
20	Mswalo	24·85	78	5518	6750	...	...	313
26	Mulichuchu ...	24·90	80	5477	5711	...	...	314
Sept.								
1	Sombe's	24·75	77	5016	5173	...	...	315
7	Pambete	26·90	81	2689	2849	...	...	316
1880.								
Jan.								
26	Makalumbi ...	26·55	78	3052	3191	...	...	317

* The last ten observations have been worked in connexion with the Boiling-point observations.

THE following heights have been computed by REGNAULT'S TABLES, and are above the sea-level :—

Date.	Place.	Boiling Point.	Thermometer.	Corresponding height from Barometrical Observations using the 1st Kew correction.	Corresponding height from Barometrical Observations using the 2nd Kew correction.	Height in English Feet by Boiling-Point.	Reference Number.
1879.		Degs.	Degs.				
Aug. 20	Mwhana	202·3	73	6037	6278	5818	308
,, 29	Mkubwasanga ...	202·1	64	6149	6363	5883	309
Sept. 13	Mtengeramemba	202·	85	6373	6592	6073	310
Oct. 3	Papakikwa ...	205·1	79	3936	4090	4196	311
,, 11	Masunga ...	203·	86	5872	6111	5478	312
,, 20	Mswalo	203·3	78	5518	5750	5256	313
,, 26	Mulichuchu ...	203·3	80	5477	5711	5271	314
Sept. 1	Sombe's	203·3	77	5046	5173	5251	315
,, 7	Pambete ...	207·8	81	2689	2849	2721	316
1880.							
Jan. 26	Makalumbi ...	207·4	...	3052	3191	2841 *	317

* The mean of observations by the Mountain Thermometers having been given, in computing the heights, the mean of the Errors were used.

INDEX.

*** For index of incidents, see Table of Contents.

Akilonda village, ii. 120.

Bagamoyo, entry into, ii. 267.
Behobeho village, i. 132, 144; death of Johnston at, 149.
Belgian International Association, mistakes of, i. 39; station at Karema, ii. 181; third expedition, 240; an agent of, 264; its plans and failures, 275; elephant expedition, 288.
Berberah, visit to, i. 5; description of, 7; a fair at, 7.
Botanical notes on Usambara, i. 46, 52, 55; on Dar-es-Salaam, 76; on Behobeho, 144; on Ukhutu, 164; on Mahenge, 189; on the Plateau, 207, 209; on Ubena, 226, 239; on Nyika, 283, 316; on Uguha, ii. 54.
Brothers, making, i. 158; ceremony described, 243.
Burton, referred to, i. 15, 135, 159, 167, 229, ii. 62.

Cameron, referred to, ii. 28, 57, 64, 70, 250, 280, 283.
Chamberè river, head waters of, i. 299; rivers flowing to, 314.
Chingambo mountains, i. 293; importance of the, 313, 314.
Chuma, his character, attainments, &c., i. 31.
Coal in Central Africa, ii. 283.
Copper, sources of, in Central Africa, ii. 283.

Dar-es-Salaam, approach to, i. 71; its inhabitants, 72; its history, 73; its surroundings, 75; natural history, notes on, 77; departure from, 86.
Debaize, the Abbé, story of his expedition, ii. 92—97.
Donkeys, in caravans, i. 120; use of, to be avoided by travellers in Africa, 122.

Elephant expedition under Carter, ii. 187, 288.
Engomma river, i. 167.
Expedition, the East Central African, its origin, i. 1; objects, 3; preparations, 34, 64; departure from Zanzibar, 68; equipment, 81; "characters" in, 82.

Fipa, country of, ii. 215, 229; journey through, 215—229.

Geological notes on Uzaramo, i. 75, 94, 134; on Mount Johnston, 148; on Ukhutu, 165, 167; on Ubena, 227; on upper plateau of Lake region, 253; on Makula's, 276; between Nyassa and Tanganyika, 315; on south end of Tanganyika, ii. 2, 23; on Marungu, 42; on the Lukuga, 67, 107; on the eastern shore of Tanganyika, 83, 84, 195, 196; review of the geology of Central Africa—*Appendix.*
Gongwe village, importance of, ii. 231.
Gum copal, trade in, i. 141; ii. 284.

Hemasasa village, i. 54.
Hendei, village, i. 56.

Indwe settlement, ii. 11; the Arabs of, 12, 18; preparations for camping the men at, 15; trade of, 16; departure from, 19; return to, 204.
Igonda town, ii. 245.
Ilimba, valley of the, ii. 215; village of, 215.
Inyamwanga, country of, i, 293, 299, 316; journey through, 293—302; a colony from, ii. 216.
Iron, in Central Africa, mistakes of travellers about, ii. 281; source of native, i. 303, ii. 282.
Itawa, country of, ii. 23, 29, 30; journey through, 23—31.
Ivory trade, decline of, ii. 17; coming collapse of, 285.

Joto village, i. 177; curiosity and cunning of the inhabitants, 177.
Jumbaka river, i. 266, 273, 276, 279, 281.

Kaboga island, now occupied by robbers, ii. 176; country north of, 83.
Kaca, river, ii. 107.
Kapampa village, hospitality of the natives, ii, 31.
Karema station described, ii. 181; unfortunate situation of, 182; explanation of the mistake, 185; the gentlemen in charge of, 187; an interesting party at, 189.
Karindo bay, ii. 197.
Katenga, island of, ii. 171.
Kawa river, ii. 214, 215.
Kichanja hills, ii. 107.
Kidokwe village, i. 102; curious ceremony near, 102.
Kifinga hills, ii. 107.
Kikonga village, i. 100; the houses described, 100; the people, 101.
Kilambo river, ii. 212; valley of, 216.
Kilengwi, one of Burton's camping places, i. 158.
Kimkumbi, i. 124; appearance of the Rufiji near, 125.
Kingani river, ii. 267.
Kiringosis, duties and privileges of, i. 84.
Kisa stream, ii. 224.
Ki-swahili language, nature and importance of, i. 29.
Kokotoni, country between Zanzibar and, i. 42.
Konde mountains non-existent as a range, i. 251.
Kungwe mountains, ii. 175.
Kwakisa, town of, ii. 132; alarming experiences at, 132—140:

scoundrelly character of natives, 139.
Kwamakumba village, i. 48.
Kwamanda village in Marungu, ii. 42; curious hill near, 42; handiwork of the natives, 43.
Kwamanda village in Fipa, ii. 229; legend in connexion with, 230.
Kwamgoya, town of, ii. 141; our troubles at, 141—144.
Kwa Muinyi Mtwanna, town of, ii. 260.
Kwihala, ii. 246, 248; a historical house in, 249.

LEOPOLD lake, streams flowing to, i. 314; visit to, ii. 223; first view of, 225; description of, 226; curious problem presented by, 227; uncertainty of native names, 228.
Litungirwa village, native art at, i. 219.
Livingstone referred to, ii. 1, 46, 63, 86, 219, 271, 273, 280.
Livingstonia Mission—a real centre of civilization, ii. 277.
Liwali village, i. 98.
Loandwa stream, i. 197.
Lafu river, ii. 11, 203.
Lafuku river, ii. 47.
Lonzua river, i. 310.
Lualaba, high temperature in its basin, ii. 122.
Lufira river, i. 266.
Lugumbu river, ii. 59, 167.
Luguvu river, ii. 177.
Luhanda village, ii. 52.
Luipa river, i. 197.
Luisi river, ii. 132, 154.
Lukuga, exploration of, resolved upon, ii. 6; first sight of, 54; description of, 56; verification of Stanley's prophecy about, 57; native account of, 58; Burton's and Livingstone's inquiries, 63; Cameron's exploration of, 64; Stanley's, 65; Hore's discovery, 66; three questions considered, 66; Stanley's theory, 67; Hore's theory, 68; suggested solution of the problem, 68; effects of first outburst, 75; rapid decrease of its volume, 103; following the course of, 107, &c.; description of beyond Akilonda, 120.
Lukuvira river, i. 281, 282, 313.

MADANGA village, i. 45.
Magila, Universities' Mission at, i. 48; scenery around, i. 49.
Mahenge, rencontre with war party of, i. 155; ravages of, 168; country of, 176, 187; characteristics of, 177, 189; reception by, 180; history of, 188; native products, 189; dress of, 189; customs, 190; method of obtaining salt, 193.
Makalumbi town described, ii. 108; its people, 109; hair-dressing in, 110; native fashions, 112.
Makapufi town, ii. 217; appearance of, 218; court etiquette in, 221.
Makasenga town, ii. 123; provoking delays at, 126; native art at, 128.
Makaunga town, ii. 120, 161; rudeness of the natives, 129.
Makihuyu, town of, ii. 130, 156; curious hills at, 130.
Makiyombo town, ii. 144; troubles and dangers at, 144—151.
Makula, i. 266, 313, 315; an

Arcadia, 267; the people, 270, 272; sanitation in, 271.
Mambwe, district of, i. 302, 304; people of, 302.
Manda village, ii. 55.
Marenga Mkhali, desert of, ii. 262.
Marungu, country of, ii. 31, &c.; mountain scenery of, 32, &c.; journey through, 31—46; people of, 34; excitability of the, 36.
Mbangala river, i. 246.
Mgunda village, i. 167; natives of, 168; scenery about, 168.
Mgunda Mkhali, desert of, ii. 260.
Missions in Central Africa: Magila, i. 48; Mtowa, ii. 60, 102; Ujiji, 86, 97, 278; the true missionary, 86; Mpwapwa, 262; Livingstonia, 277.
Mkafu river, ii. 224, 225, 229, 230.
Mkamba district and village, i. 104; harvest at, 105; a native fête at, 106; hippo hunting at, 110; husking rice at, 113.
Mkhata plain, ii. 265.
Mkilewesi village, ii. 107.
Mkomokero town, i. 180.
Mkubwasanya town, i. 225.
Mkulima - hatambula (Mount Johnston), i. 148.
Mlima Arabs, distinction between, and pure Arabs, i. 92.
Mmasoka village, i. 279.
Mmatanga village, i. 197.
Mount Johnston, i. 148.
Mpala village, ii. 46; Livingstone's visit to, 46.
Mpimbwe, Cape, ii. 195.
Msamba island, ii. 197.
Msangapwani, i. 116.
Msegwe stream, charming scenery on, i. 164.
Msendasi river, i. 168; valley of, 172.
Mshehazi harbour, ii. 79.
Mswilo town, in Inyamwanga, i. 294, 297, 314; in Ulungu, 306.
Mtandala village, i. 252, 253.
Mtemere village, i. 128.
Mtengululu district, ii. 215.
Mtowa village, ii. 59; history of its mission, 60; its missionaries, 102, 168, 278.
Mua village, i. 154.
Mukondokwa river, ii. 263.
Muluchuchu village, i. 303; country about, 303.
Munboya mountains, i. 287.
Mwhanna village, i. 214; description of houses at, 214.
Mwisika village, grand scenery at, i. 282.
Mzinga river, i. 93, 119.

Natural history notes: on Usambara, i. 44; Uzaramo, 77, 120; on Ukhutu, 172; on Uhehe, 215; on Ubena, 239; on Nyika, 292.
Negro, improvability of the, i. 140.
Nyassa, view of, from the Plateau, i. 250; reached, 259; between, and Tanganyika, 260—312.
Nyemba river, ii. 121.
Nyika, a great bee resort, i. 287; general aspect of, 292, 316; journey through, 284—293.

Outfit, common mistakes in, i. 38.

Pakachewa village, i. 194.
Paliogoalina village, i. 193.

Pamalila village, i. 284.
Pambetè village, ii. 1; scenery around, 2; desertion of, 211.
Pamlilo town, ii. 23; reception at, 25; Cameron's reference to, 28.
Pangalala village, i. 178.
Pangani town, i. 43; slave traffic at, ii. 273.
Paparua village, i. 255; striking scenery at, 255.
Pedete village, i. 193; manufacture of salt at, 193.
Plateau of Inner Africa, i. 199, 238, &c.
Plateau, Upper, of Lake Region, i. 253.
Pokirambo, i. 276; volcanic mountains at, 277.
Polungu island, ii. 197.
Pongwe village, its inhabitants, i. 91.
Porters, the Zanzibar, character of, i. 95, 115, 201, 208, 223, 280; ii. 20, 204.
Prickly heat, the, i. 63.
Pupanganda village, i. 260; the inhabitants and their occupations, 261.

Rationing of caravans, i. 294.
Roads in East Central Africa, of no value commercially, ii. 290; social advantages of, 291.
Ruaha river, description of, i. 174; tributaries of, 212, 214, 246, 248.
Ruanda town, ii. 59.
Rubber, trade in, i. 140; ii. 284.
Rufiji river, i. 119, 124, &c.
Rufuta mountains, i. 168.
Runangwa river, ii. 31.

Seasoning fever, &c., i. 63.
Setchè village, ii. 10.
Simba's town, ii. 233, 237; white men met at, 234.
Simbaweni town, ii. 266.
Slave trade, glimpses of, ii. 8, 73; Livingstone's exposure of, 271; the Sultan's prohibition of, 272; decline of on the coast, 272; still continued in the Arab settlements, 273; main lines of traffic in the interior, 274.
Sombe's town, i. 304, 314, 315; immorality of the people, 305.
Stanley referred to, ii. 57, 65, 67, 249, 280.
Stores, selection of, i. 35.
Sumbi settlement, ii. 21.
Susi, later history of, i. 33.

Taborah town, ii. 255.
Tanganyika, first sight of, i. 307; description of south end, 308; description of western shore, ii. 30, 32; conclusions about, ii. 6; evidences of its rise and fall, 22; its outlet, ii. 54, 63, &c.; Livingstone's visit to, ii. 1, 46, 63; Burton's, 62; Cameron's, 64; Stanley's, 65; Stanley's theory about, 67; Principal rivers falling into, 70; general conclusions regarding, 68, 70; description of eastern shore, 83; suggested origin of, 84; storms on 81, 98, 178.
Tchansa mountains, ii. 43, 46.
Tembwe village, narrow escape at, ii. 48.
Tippu Tib, ii. 73.
Trade in East Central Africa, i. 140, 163; prospect of, ii. 279; misleading reports of travel-

lers, 279; my conclusions as to, 281—286.
Transport in East Central Africa, discussion of the question, ii. 287; failure of all attempts with animals, 287; railways, 287; elephants, 288, 289; possible use of the camel between Mpwapwa and Ugogo, 290.

Ubena, district of, i. 226, &c.; the natives of, described, 246.
Uchungwe mountains, i. 198.
Ugogo, country of, ii. 260, 262.
Uguha, country of, ii. 46; people of, described, 46; journey through, 46—62.
Uhehe, country of, i. 212, 215; the people described, 217, 229, 234; journey through, 212—246.
Uhenge, village of, i. 229, 241.
Ujiji, its mission station, ii. 86; a walk through, ii. 88; appearance of its, 89; the market, 90; business in, 91; the people of, 91.
Ulungu, country of, i. 304, 317, ii. 212; the people of, i. 317, 319, ii. 213.
Unyamwesi, country of, ii. 243; people of, 243.
Unyanyembe, ii. 257, 258.
Uranga river, i. 180; description of, 181.
Urua, country of, ii. 119, &c.; description of, 152; people of, 151; journey through, ii. 119—168.
Usagara mountains, ii. 263.
Usambara, i. 51; forest scenery of, 52, 55, 59, 61; incidents of our trip to, 41—61.
Uzaramo, country of, i. 132; export trade of, 140; people of, 101, 135, &c.; journey through, 70—143.

Viladzi river, i. 165, 167.

Wabena, the, i. 246.
Wafipa, the, threatening visit from, ii. 201; characteristics of, 216, 221; customs of, 222.
Waguha, the, described, ii. 46.
Wahehe, the, i. 217; history of, 229; characteristics of, 234.
Wainwright, Jacob, later history of, i. 34.
Waitawa, the characteristics and customs of, ii. 23.
Wajiji, the, ii. 91.
Wakhutu, the, i. 159; their degraded condition, and its explanation, 160; climatic disadvantages of, 163; possible trade of, 163; houses of, 170.
Wakukwe, the, i. 281, 313.
Walugulu, the, i. 169.
Walungu, history of the, i. 317; condition and character of the, 318; customs, 319; ii. 213.
Wamahala, the, i. 169.
Wanangia village, ii. 52; hot spring near, 52.
Wanena, the, miserable specimens of humanity, i. 249.
Wangwila, the, i. 170.
Wanyanwesi, character of the, ii. 243.
Wanyika, the, i. 283, 284; characteristics of, 285, 292, 316.
Wapangwa, the squinting tribe, i. 247.
Warua, exciting experiences among the, ii. chap. iii.; character of the, 151.

Waswahili, the, i. 91; ii. 269.
Wazaramo, the, i. 101, &c., 135; recent changes in character and condition of, 135—140.

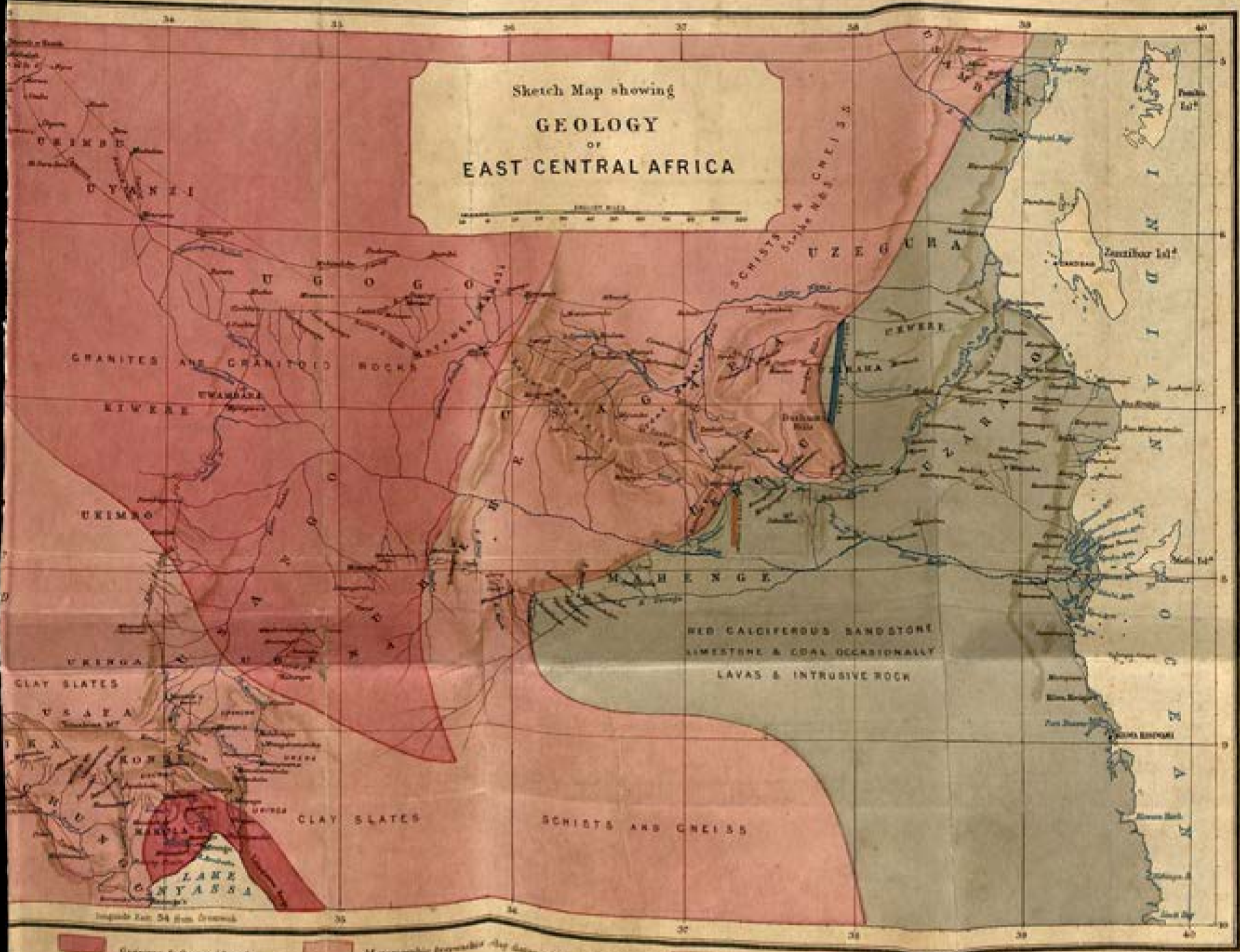
ZANZIBAR, arrival at, i. 10; the consulate, 11; scenery about, 12; society in, 13; the climate, 15; sanitary improvements, 17; characteristic sights, 17; variety of races in, 19; reception by the Sultan, 21; celebrities met at, 24; recreations in, 26; the Sultan of, 27.

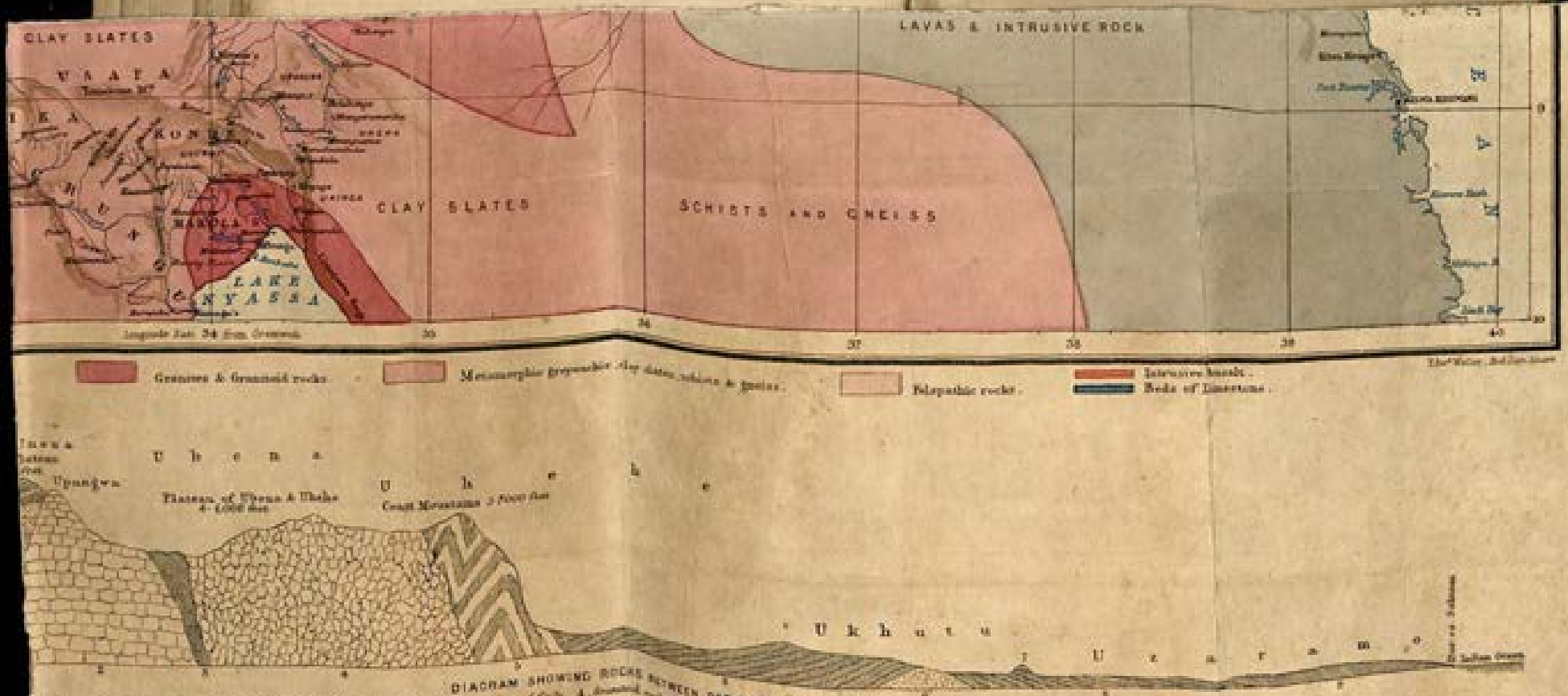
THE END.

LONDON:
GILBERT AND RIVINGTON, PRINTERS,
ST. JOHN'S SQUARE.

DIAGRAM SHOWING ROCKS BETWEEN ROSSIA AND TANGANYIKA.

1. Red & variegated sandstones & quartzites. 2. Metamorphic rocks with intrusive granites, clay slates, schists & gneiss.
3. Volcanic rocks, with small isolated areas of a later period.


Sketch Map showing
GEOLOGY
OF
EAST CENTRAL AFRICA
URIMBU
UYANZI
UGOGO
UZEGURA
Zanzibar Id.
KIVERE
UKIMBO
MAHENGE
UKUNDA
UKAFA
GRANITES AND GRANITOID ROCKS
RED CALCIFEROUS SANDSTONE
LIMESTONE & COAL OCCASIONALLY
LAVAS & INTRUSIVE ROCK
CLAY SLATES
SCHISTS AND GNEISS
LAKE NYASSA
Longitude East 34 from Greenwich
Granites & Granitoid rocks
Metamorphic frequently clay slates, schists & gneiss
Palæopaic rocks
Intrusive basalt.
Beds of Limestone.


CLAY SLATES
LAVAS & INTRUSIVE ROCK
CLAY SLATES
SCHISTS AND GNEISS
LAKE NYASSA
Granites & Granoid rocks.
Metamorphic greywacke, clay slates, schists & gneiss.
Palæozoic rocks.
Intrusive basalt.
Beds of Limestone.
Uhehe
Plateau of Ugogo & Uhehe
Coast Mountains
Ukhutu
Uzaramo
DIAGRAM SHOWING ROCKS BETWEEN DAR-ES-SALAAM AND NYASSA.

Digitized with financial assistance from the
Government of Maharashtra
on 18 July, 2018